

## MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY

I.—THE RISE AND FALL OF THE PLATONIC  
KALLIPOLIS.

BY F. V. MERRIMAN.

THE object of the Republic is to define the nature of Justice. As a preliminary to this we are given an inquiry into the nature of Justice "writ large in the State". The method of this inquiry is to construct an ideal constitution enshrining Justice, and several other constitutions diverging from it in varying degrees. From the City of Pigs to Tyranny there are seven of these constitutions in all; they are however not treated as existing simultaneously in seven different cities, but as successive phases in the history of a single city. This latter scheme of presentation has an obvious literary advantage. It sustains the reader's interest by providing him with a kind of plot or dramatic sequence, which also serves as a link between the numerous topics over which the discussion ranges. Narrative is made the vehicle of dialectic. But this can hardly have been the author's sole reason for treating the various constitutions as stages in a process of organic change. The purpose of this essay is to examine this process of organic change, as having an importance of its own; to inquire why the described changes take place as they do; and to discover if possible the elements of stability and instability which are present in each stage of the process.

From the ethical point of view the process obviously divides itself into two general stages, the rise and the decline; and equally obviously different methods of exposition are employed in describing these different stages.

The decline is illustrated with detailed explanations, *i.e.*, with continual references to the three parts of the soul, the

four cardinal virtues, and the analogy between the individual and the State.

The rise is described without this wealth of explanation. Details are determined by a theory of education, and alterations are made at the suggestion of the speakers.

There is a literary reason for this difference of method. The description of the Ideal State naturally precedes the analysis of its decline: that is to say, in examining the decline, we have previously considered, and therefore have in mind, the ideal state from which the deteriorating constitutions diverge. For literary reasons also, due to the dialogue form, the full exposition of the tripartite psychology, the cardinal virtues, and the analogy between the individual and the State, is only given in connexion with the ideal city. Therefore these three doctrines cannot be used in the dialogue for the purpose of analysing that part of the process which precedes their exposition (*viz.*, the rise) but they do become available and are employed in examining the decline.

The general result is that the decline seems to proceed with a kind of fatality, controlled by an internal law, against which the best elements in the city struggle in vain; whereas the rise is described as a process of purging, resolved on and carried out by a government in full control of the situation with which it has to deal. This also has a literary justification. Since the Ideal State is admitted to be only an ideal, it is a legitimate artifice to allow its founders more freedom than they would really possess, and to minimise the obstacles that confront them.

For these reasons then, if for no others, the process of perfection seems to be determined teleologically, while efficient causality seems to determine the stages of the decline.

If this difference is merely one of exposition, that is to say of form, it is allowable to attribute it to the requirements of the dialogue style.

If however there is a change not only in the method of exposition but also in the causal determinant of the process described, due weight must be attached to the philosophic import of this fact. It may be implied that the process of attaining perfection is a process of self-determination with reference to an ideal, and cannot take place when each stage is determined by that which precedes it; whereas a process of deterioration cannot be willed, but can only take place in the latter manner. Or it may mean that the rise of nations implies an outburst of vitality sufficient to mould a hostile environment, while a submission to the environment is a sign of weakened vitality, so that the appearance of efficient

causality as a determinant of the process is both a cause and a proof of decadence.

Now an examination of the rise according to the same principles which Plato uses in analysing the decline should help to show how far the differences in the exposition are differences of exposition merely, and how far they affect the subject-matter.

We have seen that the spontaneity of the dialogue form required that the tripartite psychology, the cardinal virtues, and the psycho-political analogy should be obtained by analysing the Ideal State, and that no stress should be laid upon them in the exposition that preceded this point. We shall attempt to estimate the influence of literary form by re-reading these principles into the description of the City of Pigs and the Fevered City, and we shall endeavour to justify this method by observing latent references to some of these doctrines in those passages which precede their positive statement.

## II.

### THE ANALOGY, THE TRIPLE DIVISION, AND THE CARDINAL VIRTUES.

The Triple Division has two forms, one psychological, a division of the soul into the elements of Reason, Spirit and Appetite, the other political, a distinction between the Governing, Fighting and Trading Classes in a community. That is to say, the doctrine is closely connected with the Analogy between the individual and the State, and it can best be approached from this side.

This analogy may at first sight seem fanciful, but it is indisputably serious. The principle is admitted by Thrasymachus without opposition in 352 *a*, where Socrates, having shown that even robbers are not unjust towards each other when they belong to the same gang, proceeds: "and in a single person also the presence of injustice will produce all those results which it is its nature to produce," that is to say, internal strife and consequent weakness in his dealings with the outside world.

If the professional eristic lets this argument pass uncontested, we must either suppose that the analogy formed part of the popular ethical theory of the time, and could have been no more questioned than a reference to 'heredity and environment' to-day; or else Thrasymachus is a very poor dialectician. In proposing to search for Justice written large

in the State Socrates introduces the analogy with more circumstance, as if it required some defence (368 *d, e*). When justice is identified in the city as *οικειοπραγία*, the speakers agree that if this definition fails when applied to the individual they will reject it and search for some other definition to be verified in the same way (434 *e*). As it is in fact applied to the individual without difficulty, this caution can only have been inserted to remind the reader that the analogy is the method of inquiry. Finally, in the discovery of Injustice, a tyrant is described, successful and strong, fulfilling the requirements of Thrasymachus; and those who with Thrasymachus incline to regard him as prosperous and happy are asked to examine the misery of the tyrannised city. They are assured that they will find a similar misery in the soul of the tyrant (576 *d*, and 579 *e*). This is a repetition of the argument already used against Thrasymachus in 352 *a*. The analogy appears at all the most important points of the argument. Its importance is incontestable. It remains to examine its nature.

Assuming the triple division to be admitted in psychology, it is plain that reason, spirit, and appetite will have different functions corresponding to their different natures. Now if we abstract the political activities of man, we get governing, fighting and trading as the political expressions of reason, spirit and appetite. One of the objects of political institutions is the economising of individual energy by the division of labour. Therefore in a well-ordered State those in whom reason predominates will govern, those in whom spirit predominates will form the army, and those in whom appetite (to be here taken as 'necessary' appetite) predominates will earn. The best division of labour is therefore obtained when the institutions created by man are a counterpart of his own psychological nature. In this form the analogy is the product of expediency. All that is required is that each man shall have one aptitude sufficiently well marked to assign him unhesitatingly to one of the three classes, and that philosophic spirited and commercially-minded men shall be born in just sufficient quantities to keep each class at the right size relatively to the two others. This is a large demand, and it is significant that the deterioration begins with mismanaged breeding, and with the assigning of children to the wrong classes.

The analogy however is not confined to the constitution in which the three elements are completely differentiated (*viz.* the Kallipolis); the inferior constitutions also have a typical character corresponding to each of them, a timo-



cratic man, a democratic man, etc. Since the Kallipolis is the only constitution under which rulers, soldiers and workers are true to their type, in one sense the ideal magistrate, the ideal soldier and the ideal worker are each of them typical of the Kallipolis. Each of them provides a differentia by which the Kallipolis is distinguishable from other cities. The worker is treated with contempt under Timocracy and is robbed under Oligarchy; he becomes an individualist under Democracy, an anarchist under Tyranny. But the soldier is more typical than the worker, and the ruler than the soldier. In another sense therefore it is the Philosopher King who is typical of the Kallipolis. The inferior constitutions progressively disregard this differentiation of function on which the analogy rests as applied to the Kallipolis. But the analogy is not thereby upset. The timocrats economise energy by neglecting philosophy in the education of their own class, and consequently do not apply philosophic principles in governing the State. The oligarchs, finding military discipline irksome, and, as they think, unnecessary, economise energy by giving up that also, and money-making determines the method of government as it does the life of each member of the governing class. So long as we regard the governor as corresponding with the city, the analogy holds good at each stage of the decline; but if we confine our attention to the workers, we shall find at each stage a correspondence but no necessary similarity between their character and that of the constitution under which they live.

We have next to consider the triple division. At first sight the symmetry of the triple division is destroyed by the subdivision of appetite into necessary or miserly and unnecessary or spendthrift. But on closer examination it will be found that each part of the soul has an inward, self-repressive, steady activity contrasted with an outward, self-expressive, and occasional activity; and in each case the former is laboriously cultivated by education, and the latter so far as possible kept under control.

Under Reason we find contemplation and government, the philosopher out of the cave, and in the cave where he spends himself in the service of others. Spirit covers two kinds of courage, *viz.*, tenacity and enthusiasm, the latter being the raw material, a capacity for rising to the occasion and dealing rapidly with a situation, the former being a capacity for martyrdom, and the result of training. Finally we distinguish acquisitive appetite, with solid comfort as its object, from spendthrift appetite, which implies moments of

self-indulgence alternating with satiety or unsatisfied craving. In each case a process of building-up is contrasted with acts of using-up.

Stress is always laid on the necessity for cultivating the former attitude of mind, partly because it can only be acquired by discipline whereas the opposite tendency is spontaneous, partly because Plato regarded stability of political institutions and of moral character as in themselves morally preferable to their opposites. It must however be observed that in the sphere of reason and spirit the discipline is imposed for the sake of efficient action. The philosopher is trained in contemplation in order that he may govern more competently: the soldier has right opinions instilled into him in order that in moments of stress or panic his energies may be rightly directed. That is to say, the former tendency is from a political point of view ancillary to the latter. The self-repressive discipline is another aspect of that economy of energy which also dictates the necessity for a division of labour. It remains to consider certain passages in the earlier parts of the treatise where the influence of the triple division is present, though for reasons already given it is not explicit.

In 347 *a* the inducements to undertake the task of governing are stated to be money, honour, or the inconvenience of being badly ruled. Money and honour are always treated as the ends pursued by necessary appetite and spirit. In the passage before us we learn that the good man is neither *φιλοτιμος* nor *φιλάργυρος*. These words belong to the regular terminology of the triple division (581 *c*, 474 *d* (*sq.*), 435 *e*); and the inference plainly is that the good man, in discarding these lower motives for governing will prove himself *φιλόσοφος*. Socrates in continuing says that in an ideal city men would compete for the privilege of not ruling (347 *a*), which further connects the good man's choice with the element of reason, since this passage plainly foreshadows the unwillingness of the philosopher to descend into the cave.

We have then a reference to the three parts of the soul applied to a problem of government.

The next instance is a reference to the triple division of society into rulers, fighters, and earners. In 407 *b* disease is said to unfit a man *πρὸς οἰκονομίας καὶ πρὸς στρατείας καὶ πρὸς ἐδραίους ἀρχάς*. These were doubtless the ordinary occupations of the Athenian Citizen, and in this passage Plato seems to have contemporary Greece in view rather than any Utopia. In spite of that, these three types of activity correspond remarkably well with the three orders

in the Kallipolis. Fighting and acting as magistrates are evidently the functions of the auxiliaries and rulers, and a reference to 417 *a* (οἰκονόμοι καὶ γεωργοὶ ἀντὶ φυλάκων ἔσονται) proves that οἰκονομία is a typical function of the third class in the city.

Finally in 413 *b* we learn of three influences under which guardians are likely to lose the right opinions acquired through their education. These are κλοπή, βία, and γοητεία, that is to say, intellectual sophistry, pain, and pleasure or fear.

The first of these assails the reason. This is stated in the text. In 440 *c*, the possession of θύμος is described as a capacity for undergoing *pain* for the sake of a belief or an ideal. The second of these corrupting influences therefore assails the spirited element. The third influence operates by an appeal to pleasure; here we are evidently in the region of appetite. This distribution may at first sight appear questionable, since we should expect fear, not pain, to be coupled with courage, and pain, not fear, to be coupled with pleasure. We must however remember that the courage in question is of the passive type, *viz.* tenacity, and that the fear which is coupled with pleasure is, like pleasure, of an entirely selfish type, that is to say, it is fear of bodily pain.

Under the influence of κλοπή the courageous impulse is misdirected. The moment of stress is never actually faced.

In the case of βία, pain operates as an exhausting power. The soldier's strength is worn down, and he gives way instead of remaining firm till death.

With γοητεία the moment of stress is faced, but an access of desire or terror makes him shirk his duty at the last moment. His reason is overpowered by an emotional paroxysm originating in the irrational part of the soul. In his case the brutal element has not been sufficiently lulled by music. The man who is overcome by βία is the "nerveless warrior" who has been weakened by too much music.

In three cases then at least we find the doctrine of the triple division influencing the exposition before it is explicitly discussed, and we may therefore assume it to be in Plato's mind throughout the dialogue.

We may suppose this triple division to be generalised from various kinds of data; from the Spartan constitution, with its Ephors, its military caste, and its helots; from a comparison of the national characteristics of Greeks, Thracians, and Phoenicians; from a consideration of the various occupations of the well-to-do Athenian, *viz.* politics, military training, and farming. The Athenian aimed at versatility

and did not attain efficiency in any of these three directions. The Spartan adopted the principle of the division of labour, distrusted versatility, and lived under a stable political system. The triple division is thus based on a division of labour, and this in turn is imposed by the necessity for economising human energy in order that it may successfully cope with a hostile environment.

It remains to give a brief discussion of the Cardinal Virtues, calling special attention to their bearing upon the stability or instability of the various constitutions which form the rise and the decline.

Wisdom is the direct expression of the thinking element, courage of the spirited element in the soul. The political function of wisdom is to impose the right character on the city by purging it, and to maintain this character when it has been imposed. Courage on its active side has an occasional function only, that of repelling any menace from the human environment. On its passive side it constitutes a firm mass of moral qualities which leavens the whole city, thus enabling a greater complexity of type to be permitted among the workers.

Justice is the virtue of specialised functions pursuing different ends. It is thus centrifugal or individualistic in tendency, and it requires to be balanced by the centripetal influence of temperance, which latter virtue introduces an identical ideal into each of these specialised activities, the ideal of serving the good of the whole. Division of labour can only attain its avowed object if it is combined with a unity of purpose. Temperance is thus the moral aspect of that system of relations between the parts which enables the parts to pursue each its own line of action steadily and uninterruptedly.

To sum up. In searching for possible causes of stability and change, we have been able to distinguish a self-expressive and a self-repressive method of life imposed on the character by different kinds of education; and, among the cardinal virtues, to distinguish two which form the foundation of political unity, *viz.* wisdom and temperance, and two which, when divorced from wisdom and temperance, have a neutral or contrary influence, *viz.* courage and justice.

### III.

#### THE RISE AND THE DECLINE.

We can now proceed to analyse the various constitutions and to form some fruitful comparisons between them.

The Rudimentary City is founded on division of labour. Division of labour is necessary for two reasons, an internal and an external; (1) different men have different aptitudes, and (2) particular pieces of work belonging to one profession must be done at particular times, and the right man must be ready to do them, that is, he must not be occupied with other duties at the critical moment. We may observe that the existence of the second reason, the external one, makes the objective reality of time and change enter as an essential element into the theory of justice. We may add a third reason, *viz.* the moral advantage of attaining a unified personality by specialising in one direction. Thus the organisation of the external world, the variety of human aptitudes, and the claims of stable character provide an economic, a social and a moral reason for the division of labour.

In these three senses also the city is *ἀναγκαιοτάτη*. Economically, it is occupied in securing the necessities of life, since it has as yet no knowledge of comforts or luxuries; socially, it contains the irreducible minimum of political organisation, *i.e.* an economic bond; and, morally, it is at the level of the 'necessary' appetites.

How far can the cardinal virtues be identified in this city? Wisdom and courage are obviously absent. Adeimantus finds justice in the relation of mutual need which binds the citizens together (372 a). This he says under the influence of Glaucon's doctrine of the social compact, according to which justice originates in the need of the weak (359 a), but in doing so he disavows the contractual element in Glaucon's theory. At Glaucon's instance the discussion passes on to the fevered city and Adeimantus' identification of justice is not discussed. Adeimantus' observation is thus used by the author to point out in passing an important fact, that of the mutual dependence of the citizens. This virtue is really a rudimentary form of political temperance. The economic environment imposes on the inhabitants the temperance of individuals; they are hardy vegetarians. But they possess this virtue in a rudimentary and negative form; their wants are few not because their appetites are under control, but because no appetites have yet arisen. When appetites do arise, they plunge into self-indulgence and have to learn self-discipline. They then become truly temperate as individuals. The environment also imposes on them a division of labour, and further compels them to rely on each other in order to make this arrangement effective. This division of labour is a rudimentary justice, and this mutual reliance is a rudimentary political temperance.

When Glaucon demands the introduction of luxuries, Socrates shows that this change will involve others, and the description of the fevered city consists in developing this change in the hypothesis. That is to say, the description begins as an exposition of the logical results of a change of hypothesis about an imaginary city, but as it proceeds, the internal logic of the process overpowers the whims of its creators and the fiction becomes a reality. Socrates avails himself of Glaucon's suggestion in order to show that the rudimentary virtues in question are entirely external in origin. If the external check be regarded as removed, the morality of the city breaks down. We may regard the process as natural and not merely logical. Foreign traders arrive with new luxuries, or some of the citizens wander and return with an *Odyssey* of strange tales.

Their spendthrift appetites are at anyrate aroused, and in order to satisfy them they require a continuous supply of objects which can be rapidly used up and replaced, spices and unguents and fine clothes, etc. The search for these luxuries arouses in them strong piratical and pugnacious tendencies. Luckily these tendencies do not lead to civil strife, for there are no rich men in the city who can be plundered. In this respect the outbreak of spendthrift appetite differs from its reappearance in the change from oligarchy to democracy, as will be noted later. The citizens combine to plunder a rich neighbour, war results, and pugnacity becomes patriotism. The necessity for self-defence compels the city to organise an army with a definite discipline, and to submit to its generals when they impose on it, for military reasons, a more ascetic manner of life. The guardians, like the eye or the ear in the human body, were originally produced with a defensive purpose, but survive to fulfil functions quite different from those for which they were called into being. Finally the purging is carried through for moral reasons consciously approved and the wisdom of the rulers inspires confidence and approval in the ruled. Thus in the rise from the rudimentary city to the Kallipolis, we see political temperance imposed successively by the economic environment, the human (*i.e.* military) environment, and by a conscious moral choice; that is, it is founded on each part of the soul in turn.

We have accounted for all the important elements in the process except the enormous outburst of "spirit" which carries the city through the process at all. There is nothing in the rudimentary city which foreshadows this. We

can merely note the first appearance of spirit as a principle of change when it becomes dominant in a city. Can we find any psychological process in the individual analogous to this? Remembering that Plato was a poet before he became a philosopher, and that the disorderly emotions which he attributes to uncensored poetry are exactly those of the fevered city, let us note an autobiographical confession which describes a similar process taking place in a human being.

Keats in the preface to his *Endymion* speaking of himself says:—

"The imagination of a boy is healthy, and the mature imagination of a man is healthy; but there is a space of life between, in which the soul is in a ferment, the character undecided, the way of life uncertain, the ambition thick sighted".

We may compare with this the passage at the beginning of the *Republic* (329 c) where Sophocles is quoted as saying that he escaped from the tyranny of his passions like a slave escaping from a mad and cruel master. If the analogy between the individual and the State applies to the fevered city, we may regard it as representing the stage of adolescence. It would be rash to press this comparison.

In the fevered city we see for the first time the appearance of a town life, full of new experiences, and aware of its own richness and colour. Its inhabitants consciously contrast their new life with the rural life which they have deserted, and despise their former condition as a life of pigs.

In working out a new vein of pleasures each citizen obtains a heightened sense of his own individuality. His ideals begin by being egoistic, and become anarchic and anti-social. His career in this direction is arrested by the discovery that some pleasures are economically spendthrift. But among his experiences is one with a contrary tendency; he has the townsman's sense of being a unit in a crowd, of identifying himself with it and of being swayed by its emotions. It is this sense of corporate solidarity which saves him from the egoistic type of ideal into which he was slipping. This is the important difference between the fevered city and the democratic city. In the latter case the ideal of solidarity has been played out and proved hollow.

This will become plainer if the rudimentary city be compared with oligarchy. They have many points in common. The oligarchy too is based on the necessary desires. It is concerned with the gaining of a livelihood, and economic discussions are again to the fore in the description of it. There is a reappearance of beggars living the life of pigs.



It is unwarlike, its stability is overthrown by the stress of war, and it ends with a breakdown of temperance. The differences are equally important. In the city of pigs, poverty was imposed upon all by the environment. It therefore caused no resentment, and enforced personal temperance on the citizens. Under oligarchic rule, poverty is caused by the deliberate policy of the rich. The poor imitate their vices, and resent the spectacle of their wealth. The remedy as before consists in the robbery of the rich by the poor, but in this case the treasure to be plundered is in the State. Once more there is foreign war, but this time foreigners intervene as allies of one party against the other (556 *e*).

The equilibrium of the Kallipolis is upset by the erratic action of practical reason, which belongs to the unstable or spendthrift side of the division which we have established in the activities of the soul. The result is produced by the assigning of children to the wrong classes, which argues a consciousness of the difficulty of forcing the various aptitudes of man into the rigid triple division of political classes. In timocracy we find spirit combined with practical reason, in democracy, with spendthrift appetite; in both cases with an unstable element in the triple psychology. In both of them conduct is guided by a desire for popularity, and consists of violent, spasmodic, and unconnected acts. Plato represents spirit as taking its colouring from some other element in the soul which dominates it. In both cases the growing anarchy is checked by a return to some form of political unity, in oligarchy or in tyranny. The complete process from the rudimentary city to tyranny can thus be regarded as a series of alternations between a greater and a lesser degree of political concentration. This tightening and loosening of the political organisation becomes the vehicle of a quite different process, namely a rise and a decline in the moral value of the various constitutions through which the city passes. We have now to examine one of the most interesting changes of all, that from democracy to tyranny.

We have seen the appearance of two hostile parties in the oligarchy, and the reappearance of pugnacity, which now serves not as a unifying agent but as a dissolvent, widening the breach between them. Under democracy dissolution proceeds apace, and the spirit of pugnacity adopts as its vehicle a number of competing political groups in a condition of internecine warfare. Once more there supervenes a process of concentration, but in this case it is one which further intensifies the evil. One of these groups overpowers the others and imposes its will on them. Unity is obtained not



by organic evolution but by natural selection among several newly formed organisms all of them parasitic. The spendthrift appetites of the tyrant awaken in him spirit and practical reason, which he employs against the other groups in the city. The whole city is his sphere of robbery. By limiting his field of organisation to a smaller scale he produces a systematic government and arrests the political dissolution. This process is described as one of purging, a parody of the purging carried out by the guardians. He also has his trained auxiliaries, and purges the city of wisdom, courage and temperance, for he represents a part which can only survive by preying on the whole and keeping it weak. The guardians and the tyrant are alike in this; both of them arrest a process of disruption by disciplining the weak individualists, who according to Glaucon combine to check the strong. The constitution of the Kallipolis was just, because it enabled each citizen to pursue his true aptitude; and he only discovered the element of constraint when he wished to go wrong. The process of deterioration consists in a progressive disregard for various types of aptitude until those who find their legitimate ambitions thwarted outnumber those who find in the constitution a sufficient expression of their needs. In terms of the cardinal virtues this process can be described thus: timocracy sacrifices wisdom; oligarchy, courage; democracy, temperance. But under Tyranny the city does not merely sacrifice justice and collapse, it organises injustice and survives. In tyranny we find a definite political reconstruction aiming not at expressing the wishes of the greatest number but at thwarting them. It is an honest analysis of Thrasymachus's ideal; for the tyranny is strong, courageous, efficient, and parasitic.

According to his view, government consists in making people do what they do not want to do, and there are two ways of attaining this object, cunning and force. Justice is the element of cunning. The government, according to Thrasymachus, makes use of the idealistic element in its subjects; it preaches obedience as a virtue, and allows the virtuous to imagine they are attaining a moral ideal by obeying. Those who are too intelligent to be virtuous are suppressed by force. The enemies of the government will be of two kinds, those who attack it and those who imitate it. The necessity for suppressing the tyrannicide agitator is evident. The latter danger introduces a most important element in Thrasymachus's theory, the distinction between the wholesale and the petty robber. The small clumsy robber attacks public security directly like a footpad. He

has to be punished in the interests of social order, and his clumsiness makes him an easy victim. But as the social order merely exists for the sake of the wholesale robbers, he is committing the additional offence of poaching on their preserves. The wholesale robber may be unjust by a moral standard, but is just, or, what is more important to Thrasymachus, successful and happy, by the political standards of the city-state, because he has got behind the political machinery which punishes injustice and continues to punish minor robbery. Political parasitism is not so visibly harmful as burglary, and goes unchecked because the operation to extract it is difficult and perilous. The prevention of "graft" is a permanent problem of government. We see an analogous but slightly different process referred to in H. G. Wells's *Tono-Bungay*, chap. iii., § 1: "When my uncle talked of cornering quinine, I had a clear impression that any one who contrived to do that would certainly go to jail. Now I know that any one who could really bring it off would be much more likely to go to the House of Lords." This indictment, whether true or false, is in the manner of Thrasymachus.

Tyranny is safe so long as its docile and virtuous subjects do not begin to see through the maxims they have learned. After that point the government has to depend on force. Similarly the Kallipolis breaks down when men begin to doubt the wisdom of the philosopher. The tyrant fails through being too selfish, the philosopher-king through being too other-worldly.

We are now in a position to examine whether the moral corruption of the tyrannical government really weakens its political efficiency, which Thrasymachus denies, and whether Socrates has convincingly met Thrasymachus's denial.

If the tyrannised city embraced the whole universe, and if the tyrant were omnipotent, his egoistic legislation would be the norm of justice. But there is always the possibility of rebellion with or without external help. Taking Thrasymachus's own instance, the fattening of sheep would be dangerous if the sheep could combine against the shepherd. Moreover, tyranny being founded on spendthrift appetite, the tyrant robs and ill treats even the submissive; submission therefore is not the law of survival, for the prosperous are lopped off. The tyrant must allow sufficient vitality to other groups to draw his sustenance from them, but not enough to let them overpower himself. Their activities must therefore be alternately encouraged and thwarted. He cannot like Caligula wish that the Roman people had only one neck. If he maintained the efficiency of his government but sup-

pressed his spendthrift appetites and otherwise left his subjects alone, he would approximate to the philosopher-king, for he would be so far governing in their interests. The whole object of the description of the purging carried out by the tyrant is surely to show that the difference between his government and that of the philosopher-king is not so much in political structure as in moral nature, that it is one of ends rather than of means. The political structure of the two governments is so similar that Euripides praised tyranny, and Plato himself tried to build the one upon the other in Sicily.

The conclusion to be drawn is that evil does obtain a certain measure of success in this life, provided it adopts certain principles of organisation that are in themselves neither good nor evil, but merely efficient. This is enforced by a consideration of the proof of the immortality of the soul (608 e). It is there urged that physical death, or the separation of soul and body, is due to bodily causes only and is a matter of bodily structure. Similarly the dissolution of political society is due to political causes to be found in the structure of the body politic. As the moral vice which most injures the body is intemperance, so political society comes nearest to dissolution in democracy where political intemperance is rampant.

Why then does Plato not face the question whether intemperance and not injustice is a spiritual dissolvent affecting the permanence of the soul? He has forestalled this objection by showing that as the tyrant organises a definitely evil political system out of the materials provided by political intemperance, so in his own soul a brutal element makes itself a centre of organisation for the intemperate desires which exist in it. In any case injustice does not receive its full punishment in this life, and it is only in the life to come that moral evil and moral good can be separated from the process of growth and decay (that is, from an organic system), and judged solely and simply on their merits in the way that Glaucon and Adeimantus desire.

## II.—MR. RUSSELL AND SOME RECENT CRITICISMS OF HIS VIEWS.

BY OLIVER STRACHEY.

IT is a testimony to the increasing prominence which Mr. Russell's philosophical views are gaining that no fewer than three articles in the April number of *MIND* (N.S., No. 90) should have been criticisms of his doctrines. A number of different points were touched on, and Miss Stawell's and Mr. Turner's objections very largely overlap. So that perhaps I may be allowed to deal with their more important remarks together, point by point; and to add an answer to Mr. C. I. Lewis's criticism of Mr. Russell's notion of implication.

### I.—KNOWLEDGE BY ACQUAINTANCE AND BY DESCRIPTION.

It is not difficult to see that there are two senses in which we may use the word 'know'. Firstly when we say that we know a fact or a truth, a judgment or a belief is always involved. In these cases we may always express our knowledge by the phrase 'know that . . .'. Knowledge in this sense is always *knowledge that* something or other is in some relation to something, or has some property.

Secondly when we say we know something other than a fact or a truth, we may mean that we are directly acquainted with it. Thus to know one's own sense-data or emotions is an immediate act of the mind, involving no judgment or belief. In this sense knowledge is, so far as I can see, equivalent to what Mr. Bradley calls 'feeling'; and can never be expressed by the phrase 'know that . . .'.

It is in these two senses only that Mr. Russell uses the word 'know'. When he says 'I know something,' or 'I have knowledge of something,' then if the 'something' is a fact or a truth, he means knowledge in the first sense; he knows *that* something is true. If the 'something' is not a fact or a truth,<sup>1</sup> then Mr. Russell always means that the

<sup>1</sup> Mr. Russell does hold (p. 213, *Problems of Philosophy*) that knowledge by acquaintance is itself in some cases knowledge of a fact, though no judgment is involved. This however need not be considered at this point.

'something' he 'knows' or 'has knowledge of' is something with which he has immediate acquaintance, of the kind we all have of our own feelings and sense-data.

But in ordinary conversation we often speak of 'knowing' things that are neither facts nor truths, and with which we are not immediately acquainted. Thus we may say we 'know' our neighbour's feelings, or 'have knowledge of' a real physical table. Mr. Russell never uses the words 'know' or 'have knowledge of' in such cases, without qualification; he holds that all such knowledge is derivative, and amounts only to a knowledge of truths *about* the object in question. Thus we know a lot of facts about the physical table and our neighbour's feelings, but we do not know them. Mr. Russell is very careful to avoid this use of the word knowledge, and in such cases always says that he 'has knowledge about' his neighbour's feelings, or 'knows facts about' the table. He calls this also 'knowledge by description,' and might say that he knows the table by description.

Thus when Mr. Russell, in speaking of things that are not facts or truths, uses such phrases as 'to know,' 'to have knowledge of,' 'to be acquainted with,' he is always referring to immediate knowledge by acquaintance; when he says 'to know about,' 'to know some fact about,' 'to know by description,' he is always referring to knowledge of truths. Similarly when he says 'to think of' he implies immediate acquaintance; in other cases he says 'to think about'. It is important to bear this well in mind in reading Mr. Russell; Miss Stawell for instance has in several cases misunderstood him from a failure to realise this distinction. In what follows I shall use Mr. Russell's terminology.

Both Miss Stawell and Mr. Turner find difficulties in a principle which Mr. Russell lays down as fundamental, *viz.*: "Every proposition which we can understand is composed wholly of constituents with which we are acquainted". Now when I make a judgment, my mind is in a certain relation to a proposition, and Mr. Russell holds that I cannot make the judgment unless I understand the proposition. A proposition consists of certain terms and at least one relation; it is usually expressed by a form of words which *mean* the proposition, but of course are not themselves constituents of it. When Mr. Russell speaks of 'understanding' a proposition, he merely means, I take it, understanding this form which expresses the proposition, *knowing* in fact what the words mean.

No one knows better than a philosopher that the same words may be understood differently by different people; and in this

case, since the proposition is the meaning of the words, and since different meanings are conveyed to different people, these people are in reality judging different propositions, though these different propositions are expressed in the same form of words. It is therefore not always so easy as Mr. Turner seems to imagine, to determine the constituents of a proposition, when we are only given the words which express it. For if a word may be allowed to have different meanings for different people, then any form of words which expresses a proposition may really express several, each of which will have a different set of constituents. If on the other hand we take it that each word is to mean only one thing, then only one proposition will be expressed; but no one will be able to judge it who does not understand it in that definite sense, *i.e.* who does not know what the words mean. This knowledge must be acquaintance.

A simple example may make this clearer. Suppose that yesterday I heard a beautiful tune. If I now judge that it was beautiful, there are two possible cases. Firstly I may remember the sounds. In this case my judgment will include as a constituent the very sense-data in question; since I remember them, and thus am still acquainted with them, they will be clearly before my mind, and when I make the judgment the judging relation will hold between me and the very sense-data I heard. The judgment will be a relation between myself on the one hand, and on the other the particular remembered sounds, the universal 'beautiful,' and the relation 'was'. Here then the sense-datum is a constituent of the proposition.

But secondly, suppose I have forgotten the tune; it is not difficult to see, I think, by introspection, that in judging that it was beautiful my mind will now have before it (in the judging relation) a very different object from the remembered sense-datum of the previous case. The tune has simply gone from before my mind, and I can have no immediate relation of judgment with it any more than of perception. When I judge that it was beautiful, the 'it' is simply (in so far as it is a constituent of my judgment) a collection of universals (the concepts 'tune' and 'hearing') related in a definite way to the particulars 'me' and 'yesterday'. In these two cases then, we have two quite different propositions, in one of which the actual sense-datum is a constituent, while in the other is only a description of it. Both propositions can only be expressed in the one way, *viz.*: "The tune I heard yesterday was beautiful"; and both of them are *about* the same thing, namely the sense-data in question.

Mr. Russell holds that in any proposition about particulars that we can understand, if we are acquainted with the particular it may be a constituent of the proposition; if we remember the tune we may judge *itself* to be beautiful. But if we are *not* acquainted with the particular, we shall not understand (*i.e.* know the meaning of) any word which means it, and the particular can not be a constituent of the proposition; in this case there will be terms which *describe* the particular, and *they* will be the constituents of the proposition, and not the particular itself.

If then we consider the form of words, "Bismarck was an astute diplomatist," we must take our choice; either the word 'Bismarck' means the particular Bismarck and him only; in which case the words will certainly express a proposition, but one which no one but Bismarck himself can understand. Or else the word 'Bismarck' may have other meanings, besides the particular man; in which case 'the proposition' expressed by the words becomes many different propositions, according as we think of 'the first chancellor of the German Empire,' 'the chief adviser of the first German Emperor,' etc. But all of them give us knowledge *about* the same thing, *viz.*, the real Bismarck.

Miss Stawell is disinclined to accept this principle on the grounds that if in such a case the real Bismarck is not before our minds when we judge, our mental 'hold' of the universe is depreciated. But, after all, Mr. Russell's principle is only a precise statement of what most people would probably readily admit in the form that all our knowledge about existents must be founded in some sense on experience; and surely we have as good reason to congratulate ourselves on the vast field of our possible knowledge of truths, as to repine at the inevitable limits of our own immediate experience. A man born blind can clearly never have the same 'hold' on the visible world as the rest of us have; for he does not know what seeing really means, it being a thing he only knows by description. This is deplorable, but must be accepted; what is more remarkable is that he should, in spite of his affliction, be able to know so much about sight and visual sense-data.

Mr. Turner's proof that Mr. Russell cannot understand his own propositions is an extremely curious piece of argument. Mr. Russell's proposition discussed is the following: "A circular coin has a real shape different from its apparent shape". Mr. Turner first assumes that some one particular physical coin is a constituent of this proposition, and then points out that 'the coin' cannot be known to Mr. Russell



by acquaintance as it is a physical object like a table. If Mr. Turner could really produce physical coins from so unlikely a hat as this proposition, he would be fortunate indeed; but I fear that all except the conjurer himself saw it drop from his shirt-sleeves. The proposition of course is not even *about* any particular coin; it asserts a relation between the concept 'circular coin' and certain kinds of shapes (which are also concepts). And these concepts are the constituents of the proposition.

## II.—PARTICULARS AND UNIVERSALS.

The distinction between these is easy enough. Particulars exist in time, and are objects that can only be *terms* in a proposition. Universals have a timeless being, and can occur in propositions either as predicates or as relations between terms.

It so happens that in each one's experience particulars are private to himself.<sup>1</sup> Thus to take the case of sense-data: If I look at a white patch for any length of time, there will be a continuous succession of sense-data (white patches), all very much alike, perhaps even exactly alike, but all different, numerically at least. If I had no memory, each of these sense-data would be absolutely private and entirely cut off from every other; but by means of memory I can remember and compare my own successive sense-data, and so in a degree break down their privacy. But so far as other people go, my sense-data obviously remain, as a class, completely private; no one else can know them at first hand, or compare them with his own. This is what Mr. Russell means by the 'privacy' of sense-data; and a similar privacy obtains in the case of our emotions and other states of mind.

This privacy does not characterise 'universals,' of which it is a distinctive mark that several people can think of (*i.e.* be acquainted with) the same universal. Mr. Russell I think, by a slip, implies<sup>2</sup> that it is also true that no one person can think of one particular twice; and this has caused a difficulty for Miss Stawell. She claims that she can think twice of the particular moment of her waking on 4th June, 1909, and quite rightly; so long as she remembers that moment, she can certainly think of it. It is of vital importance that memory should give us knowledge by acquaintance, for if

<sup>1</sup> All particulars are not of course private. Unperceived particulars, being known by no one, are private to no one.

<sup>2</sup> *Problems of Philosophy*, p. 155.



it did not the whole fabric of our knowledge would crumble away. But when Miss Stawell goes on to claim that other people can also think of that particular moment, she is, I conceive, confusing *thinking of* with *thinking about*, two notions which Mr. Russell distinguishes, as I have shown in the previous section. Any one may think *about* Miss Stawell's private experiences, but no other person can think *of* them, as no one else can be acquainted with them.

Another difficulty, felt by both Miss Stawell and Mr. Turner, is how to reconcile the privacy of sense-data with Mr. Russell's account of how we come by our knowledge of some universals. "By seeing many white patches," says Mr. Russell, "we learn to abstract the whiteness they all have in common," and so acquire knowledge of the universal 'whiteness'. But the difficulty is now raised that this process can give us no knowledge of universals outside our own private experience; whereas it is the essential feature of a universal that we have a *common* knowledge of it.

"If," says Mr. Turner, "the existence of the white patch as a sense-datum is determined to be within my private experience because it is conditional on the activity of [my?] sense organs, the only difference between the white patch as a sense-datum, and the whiteness as a universal, is that the latter is conditioned, in addition to the action of [my?] sense organs, by the activity of [my?] higher cerebral centres, on which the process of abstraction depends."

But Mr. Russell nowhere contends that the *existence*<sup>1</sup> of whiteness as a universal depends on any process of abstraction at all, nor can this be inferred from his view that our *knowledge* of it does so arise. There are certainly large numbers of universals that no one has ever been acquainted with; and whiteness undoubtedly *existed*<sup>2</sup> as a universal long before I acquired my *knowledge* of it by finding it to be a property common to several particular and private sense-data. The matter will become clearer, perhaps, if we consider the universal 'visibility' instead of 'whiteness'. Among my various sense-data I can distinguish a number that are visual; among all of these I discover one common property—visibility. This one object, appearing identically at many different times and places, whenever I see anything, is a universal, though so far we have not got beyond my own knowledge of it. But it is clear that if another person has visual sense-data which have the same common property as mine, then he also will know the universal 'visibility,' and

<sup>1</sup> Or 'being'.

<sup>2</sup> Or 'had being'.

we shall have a common acquaintance with one universal. Whether any one else actually *has* such visual sense-data, I cannot of course decide by internal inspection; it depends on whether any one else can see, and this question must be decided on other grounds. This seems to dispose of Mr. Turner's argument that "Mr. Russell's insistence on the restriction of sense-data to private experience will not harmonise with his belief in the common knowledge of universals". For it is only our own knowledge of such universals as 'whiteness' that Mr. Russell holds us to derive from our private sense-data, not our belief in other people's knowledge of them; far less does he hold that the *existence* of such universals depends on our sense-data.

But I think that a misconception often arises from the use of such expressions as 'abstraction' and 'common property'; and possibly Mr. Turner's objection may be partly founded on mistaking Mr. Russell's meaning in the use of these phrases. When we say that 'whiteness' is a common property of particular white patches, there is a tendency to suppose that somehow 'whiteness' is a *constituent* of all these particular patches, or is *in* them in some sense; and when we say we get to know whiteness by abstraction from particular white patches, we might similarly be supposed to mean that we mentally 'abstract' the white constituent from each of them. But this would be an entirely wrong notion; for we may presume the particular white patch to have *no* constituents, but to be a perfectly simple and single sense-datum, such that no amount of mere analysis of it could give us any knowledge of any of its properties.<sup>1</sup> When Mr. Russell says that a thing has a property, he means simply that something is true of it. If anything can be truly said about A, then A has a property; and if the same thing can be truly said about B, then A and B have a common property. Thus I am in this room, and so have a property; and as the chair in which I am sitting is also in the same room, the chair and I have a common property, the property, namely, of being in this room. But this is not to say that the chair and myself have a common constituent, nor that 'being in this room' is a part either of me or of the chair. The fact that we are either of us in the room could be arrived at by analysis of 'the room and its contents,' but not by analysis of either me or the chair.

<sup>1</sup> Whether any particular sense-datum is actually thus simple and single does not affect this argument, which is that to have a property does not imply complexity. This externality of relations is of course fundamental in Mr. Russell's school of thought.

Similarly the property of 'whiteness' is entirely external to the particular white patches Mr. Russell is talking of; so that it may appear misleading to speak of arriving at our knowledge of the universal 'whiteness' by abstraction from particular white patches, seeing that there is no 'whiteness' in the particular patches to be abstracted from them. And I do not think the word 'abstraction' a very suitable one for the kind of process Mr. Russell has in mind, which is something like this: we see a number of patches, and become aware that they are all similar in a certain respect. Thereupon we classify all patches which are similar in this respect as 'white' patches; and the recognition of the respect in which they are all similar is the recognition of the universal 'whiteness'. When we see that all the patches are similar in *one* respect, we are seeing that they have a common property, and this property is the universal 'whiteness'. Since then 'whiteness' is entirely external to the particular white patch, we can see that the privacy of the particular patch is not at all inconsistent with the publicity of the universal; although our *knowledge* of the universal may have arisen through our knowledge of the particulars.

The example chosen by Mr. Russell seems to have a special difficulty for Miss Stawell, who does not see "how I can be certain that my whiteness even resembles another's whiteness"; and certainly it seems at first easier to suppose that other people do not have a colour sense like mine than that they do not see at all; which is what makes me prefer 'visibility' to 'whiteness' as an example. Nevertheless, the arguments in favour of a common range of colours would seem to be of the same nature and force as those which lead us to believe that other people see, and to reject solipsism.

### III.—PRIVATE AND PUBLIC SPACE.

In *The Problems of Philosophy* Mr. Russell gives us the bare outline,—hardly more than a few hints,—of a new theory as to what the space of physics must be as compared with the private spaces which each of us knows through his senses. Different senses, he holds, give us different spaces; and, in addition to this, the spaces which each person knows through his own senses, are private to himself, and different from the spaces known to any one else. If then there is a public space, in which the objects of physics exist, it must be different from any of these private spaces, and yet must in some ways correspond with them. Those who wish to know more of this very interesting and difficult theory should read Mr.

Russell's recent book, "Our Knowledge of the External World."

Meanwhile I must deal with Mr. Turner's somewhat summary demonstration that Mr. Russell has once more contradicted himself. Mr. Russell says: "We can know the relations required to preserve the correspondence [of physical objects] with sense-data," but again, "we cannot have immediate acquaintance with physical distances". On this Mr. Turner observes: "But as James pointed out long ago, the relations between spaces are themselves spaces; hence the position becomes that while we cannot know physical spaces if they be themselves terms, we can know them if they be (as they must be) relations between physical spaces as terms". I am not sure that I can grasp Mr. Turner's argument, which seems to me rather loosely stated. What does he mean, for instance, by the word 'spaces'? There is only one physical space, and I think he must mean 'parts of space'. If so, it is not true that the relations between different parts of a space are themselves parts of that space (even if James thought so), though it may be admitted that such relations are spatial, and peculiar to that space. If this is what Mr. Turner means, his argument becomes the following: the relations between parts of a space are peculiar to that space; hence if we cannot know the parts of physical space we cannot know the relations which hold between them; for such relations must be just as peculiar to physical space, and so as unknowable, as the terms they relate. This argument would, I think, be quite sound if the relations which Mr. Russell says we can know are the relations between parts of physical space;<sup>1</sup> but I do not think this is his meaning. I think that Mr. Russell simply means that we can know the relations between physical space and private spaces that must hold if there is to be the necessary correspondence between the objects of physics and sense-data. And in that case Mr. Turner's argument falls to the ground, unless we are to take his words literally as meaning that the relations between *different* spaces are themselves spaces, an assertion that would look very like nonsense.

#### IV.—A PRIORI KNOWLEDGE.

Miss Stawell's chief objection to Mr. Russell's theory of 'a priori' truths, is to his contention that knowledge of such

<sup>1</sup> In the revised edition of the *Problems* the passage has been altered to read: "We can know the properties of the relations required, etc."—an alteration which would meet this objection.

truths can, by themselves, give us no knowledge about particular existents. Mr. Russell states that the proposition 'two and two make four' does not itself assert or imply that there are any particular couples, and so fails to make any statements whatever about any actual particular couple. Miss Stawell urges that although no categorical statement is implied, yet a hypothetical one is.

Now 'two and two make four' does seem to imply a sort of hypothetical proposition like this: 'If  $a$  and  $b$  are a couple, and  $c$  and  $d$  are a couple not overlapping with  $a$  and  $b$ , then  $a$  and  $b$  and  $c$  and  $d$  are four'; but this is not a real proposition, for  $a$ ,  $b$ ,  $c$  and  $d$  are ambiguous in the sense that none of these letters stand for any particular thing at all; they stand for variables. The statement becomes a proposition if  $a$ ,  $b$ ,  $c$  and  $d$  are *apparent* variables, i.e. if we assert the statement for *all possible values* of  $a$  and  $b$  and  $c$  and  $d$ ; but then no particulars enter into the proposition, and its truth is independent of the question whether there actually are four distinct particulars in the world or not. We shall thus have got no nearer to a statement about any particular than in our original proposition of 'two and two make four'. If on the other hand we make our hypothetical assertion about *any assigned value* of  $a$ ,  $b$ ,  $c$  and  $d$ , then these letters stand for real variables and the statement is not really a proposition at all. If we choose to use the symbols Brown and Jones instead of the symbols  $a$  and  $b$ , we shall get what appears to be a proposition: 'If Brown and Jones are a couple, and Smith and Robinson are a couple, then Brown and Jones and Smith and Robinson are four'. But in that case the word 'Brown,' like the letter  $a$ , does not stand for the particular man Brown, but for anything in the world and for nothing in particular. And in fact, as I said, this is not a real proposition; to turn it into one, some definite things must be put in place of the variables  $a$ ,  $b$ ,  $c$  and  $d$ ; and according to what values we give to these letters we shall get different propositions. This process will be the application of our 'a priori' knowledge to a particular case. Now before we can replace  $a$  or  $b$  by any particular existent, we must clearly either know that existent, or at the very least we must know that it *does* exist and be able to describe it. So that before we arrive at a real proposition about the particular men, Brown and his friends, we require besides the 'a priori' knowledge that two and two make four, the knowledge by experience that these people exist. Thus no application of 'a priori' knowledge to particular existents can be made

without the assistance of some knowledge that is not 'a priori'.

Mr. Turner's version of Mr. Russell's theory is that "a priori knowledge is only valid (as a *priori*) in cases where we can experience the terms involved"; and he asks what, in that case, is the value of a *priori* knowledge at all. Considering the number of pages Mr. Russell has devoted to proving that 'a priori' knowledge is *never* concerned with things that we can experience, Mr. Turner's conclusion is surprising, but needs no further comment.

#### V.—MR. C. I. LEWIS'S CALCULUS OF STRICT IMPLICATION.

Mr. Lewis says that the existence in our world of *material implication*, as used by Mr. Russell, may be doubted. Now according to Mr. Russell '*p* implies *q*' when 'either *p* is false or *q* is true,' *p* and *q* of course being propositions. But if it be admitted that there are true and false propositions in our world, it is surely obvious that another couple may be found such that 'either *a* is false or *b* is true,' and that there must be a relation holding between *a* and *b*, which also holds between *p* and *q*, but which does not hold between any two propositions *x* and *y* of which it is not true that 'either *x* is false or *y* is true'. This is material implication, and whether it is of any use or not, it certainly is to be found in our world.

But apart from this point, Mr. Lewis dislikes material implication, chiefly because it does not admit of a distinction between the true and the necessary, or between the false and the meaningless. Thus we could say truly: "Either *Cæsar never died* is false, or *the moon is made of green cheese* is true". We could say this truly because *Cæsar* did die; but it does not seem to warrant the statement that *Cæsar never died* implies that *the moon is made of green cheese*.

To remedy this Mr. Lewis proposes to use a different relation, which he calls 'strict' as opposed to 'material' implication. According to this suggestion, *p* implies *q* (strictly) if 'either *p* is false or *q* is true' *intensionally*, as distinct from Mr. Russell's mere disjunction. When Mr. Lewis tries to explain more definitely what this intensional disjunction means, I find it rather hard to follow him; but it is clear it has some connexion with necessity. He says: "The intensional 'either *p* or *q*' means 'it is impossible that *p* and *q* should both be false; if either *were* false, the other would necessarily be true; the negation of either (strictly) implies the other". It is evident that Mr. Lewis's implication would not hold between two such true propositions as 'Cæsar died' and 'two and

two make four,' because there is no *necessary* connexion between them. In the only example he gives, he claims that 'To-day is Monday' implies that 'to-morrow is Tuesday,' while 'To-day is Monday' does *not* imply that it is raining to-day, even if it actually is raining.

Now I am with Mr. Lewis up to a certain point. It is clear to me that there *is* a relation holding between certain propositions, which is what we usually mean when we use the word 'imply,' and which is very different from Mr. Russell's material implication; and it is this kind of implication, and not material implication, that is of immediate importance in our every-day thought. Thus we must realise that when I say, "If women had votes in England the world would be better," I am asserting an implication that is not consistent with the statement, "If women had votes in England the world would be worse". Yet since women have *not* got votes in England, and since according to the principles of material implication any false proposition implies all propositions, whether true or false, there is no *material* inconsistency between my opinion and Lord Curzon's.

For our every-day use therefore, and to help us to select a course of action, Mr. Russell's material implication is of no use to us; and it is equally clear that there *is* a relation, of the kind Mr. Lewis speaks of, which we *do* use. But though I agree so far, and believe moreover that Mr. Lewis has before his mind the very same relation that I have before mine, I cannot accept his account of it as being founded on 'necessity'. What exactly is the 'necessity' of a truth? it cannot depend upon our beliefs, because we agree about so very little. I myself do not agree that it is a necessary truth that Tuesday must be the next day after Monday, for in coming home round Cape Horn I have known two consecutive Fridays; and M. Bergson more heroically disputes the law of contradiction. If then the law of contradiction is a 'necessary' truth, it must be so in virtue of some property of its own, and not in virtue of our belief in it. But in that case I can only say that I can see no such property. To me propositions seem to be simply either true or false; and to say that some true propositions are necessarily true, while others only happen to be true, conveys no meaning.

The relation I mean, which I believe to be the same as that which Mr. Lewis calls 'strict implication,' can, I think, be described without reference to anything so doubtful as necessity. Mr. Russell speaks of 'formal implication,' which may be thus explained: there are functions of the form ' $\phi$   $x$  implies  $\psi$   $x$ ,' where the ' $x$ ' is a variable. An example is " $x$  is



a man implies  $x$  is a mortal," where ' $x$ ' may stand for anything at all. In these cases what is asserted is not an implication between particular propositions (for the function does not become a proposition till some definite value is given to ' $x$ ') but an implication as it were between certain-forms. In our example there is formal implication between 'is a man' and 'is a mortal'. If any particular value be given to ' $x$ ' (say Socrates), we get a material implication between two propositions. Thus in "Socrates is a man implies Socrates is a mortal" the implication, so far as Mr. Russell is concerned, is material. But it is evident that between two propositions which are thus particular values of a formal implication, there is a relation which holds over and above the mere material implication that holds between *any* two truths. We must admit material implication between 'Socrates is a man' and 'Julius Cæsar died,' but we can see *another* relation *also* between 'Socrates is a man' and 'Socrates is mortal'; and this other relation we always find to hold between any two propositions which are obtained from giving particular values to the variables in a formal implication. This relation is the 'strict implication' of Mr. Lewis, and holds between some only of the cases where material implication holds.

With these reservations as to his account of 'strict implication,' I agree with Mr. Lewis that there is such a relation, that it is different from material implication, and that it is 'strict' and not 'material' implication that we are generally concerned with in our thinking. At the same time I must demur from his conclusion that 'strict' implication should have been used by Mr. Russell instead of the 'material' kind. Mr. Russell, in dealing with the principles of mathematics, is concerned only with pure logic; whereas 'strict' implication, as Mr. Lewis is at pains to point out, is a notion of applied logic, the particular logic which we human beings actually use. Mr. Russell has to show what fundamentals there must be, if there is to be any systematic reasoning at all about things; Mr. Lewis is concerned about the fundamentals of the system of reasoning actually practised by mankind. Material implication, being a more general relation than strict implication, is necessarily a notion more suited to pure logic.



### III.—WHERE DO PERCEIVED OBJECTS EXIST?<sup>1</sup>

BY DURANT DRAKE.

THE question that forms the title of this paper is one of those crucial questions to which a definite answer must be given by any thoroughgoing system of realism. Idealism, in its easy fashion, escapes it. But as soon as we conceive the world realistically, as a time-and-space order of objects, we must set to work to find a place in that order for every known fact. If we fail to find a locus there for perceived-objects—those surest of all existences, if we leave them in some *terra incognita* outside the natural order, then, however loudly we call them 'objects,' we are really sliding into an ontological dualism, and might as well call them 'mental' and be done with it.

It is not an answer to this question to insist that the peculiarities of perceived-objects are physically explicable—as when Prof. Dewey tells us that the convergence of seen railway tracks is due to well-known optical laws. Doubtless. But now to our question. Here is a perceived-object describable as *converging railway-tracks*. Where does this object exist? Not along the actual right of way; those tracks were laid and remain parallel. Not where the real train is to run; certainly one would dislike being on a train that had to run over converging tracks. Where then? We are not told.

Or take the well-known drab tree seen by the colour-blind man. It is as real to him as our green trees are to us. But surely the 'real' tree is not drab. Where then does this drab tree find room to exist—with space already filled by green trees, and other objects? It has a name ('perceived-tree') kindly provided by the committee on definitions, but it has no local habitation.

One way out of this difficulty is that which is adopted, if I understand him, by Prof. McGilvary. Perceived-objects

<sup>1</sup> This paper, in an earlier form and under another title, was read before the American Philosophical Association on December 27, 1911.

exist in the same time-and-space order with real-objects, interpenetrating them and occupying often the same bits of space simultaneously occupied by quite alien real objects. Only one real object can occupy the same bit of space at a time; but perceived-objects are not so limited, and can overlap and telescope into one another and into real objects to their hearts' content. Qualitatively different and incompatible as they are, they will not blend into one real object; nor have they always the opportunity to do that if they could, since the real-object may have disappeared entirely and its place been filled by some other object at the moment when the perceived-objects exist. But if the real-objects which apparently fill up space have not really a monopoly of it, and will permit perceived-objects to stand, as it were, in their very shoes, we can proceed to pack both sets of objects into the one time-and-space order.

But this species of juggling hardly seems satisfactory. If perceived-objects are truly existing amidst real-objects, why are they not efficacious there, and discoverable there by others than the particular perceiver? Truly they are in the world but not of it. Moreover, since they are undeniably functions of the brain-process of the particular perceiver, and stamped with the ear-marks of a particular organism, how do they get out into the world? What is this mysterious process of 'projection,' and what is its mechanism? The whole matter remains puzzling and dubious. Perceived-objects are *personæ non græte* in the physical world.

Another way out is to frankly give up the conception of a single temporal-spatial order into which everything must fit, and let reality consist of any number of spaces, which perhaps interpenetrate, but cannot be dovetailed together. But then it must be explained why science seems to give us a single order. And this non-dovetailing world is not one that it is easy to believe in. Of course we must "accept the universe," as Margaret Fuller grandiloquently did—evoking Carlyle's brusque "Gad! she'd better!"—accept it for whatever it seems to be, genuine universe or hodge-podge of irrelevant spaces. But if we can construct a world-theory that includes all known facts in one coherent homogeneous natural order, that theory will be in so far more plausible.

My own belief is that a theory which, at least from the standpoint of this particular problem, may perhaps best be called Representative Realism, can meet this desideratum. By putting perceived-objects not at the real-object<sup>1</sup> point,

<sup>1</sup> I use the terms urged by the committee on definitions of the American Philosophical Association, though I consider them somewhat misleading.

but at the brain-point in the world-order, we can picture a homogeneous natural order into which all our delicately-varying and evanescent perceived-objects can fit without unduly jostling one another. There is not room for them all at the real-object point; there is room for them, each in its separate organism. Our several perceived-objects are each the effect in a different organism of the one real-object beyond the organisms; an effect which varies concomitantly with the variations in that real-object, acts as a functional substitute for it in the life of the organism, and may therefore be called a representative in that organism of the real-object.

I am aware that the account of perception as representation is discredited just now. The feeling is prevalent that it has had its day. But I am convinced that it can be so formulated as to escape the objections commonly raised to it, and that to it we must return, as to a haven of refuge, after the present period of striving and straining for an epistemological monism.

I first wish to make clear that I do not use the term 'representation' to mean copying or picturing. The perceived-object is not a miniature of the real-object. It may be, for all we can now say, as different in nature as a colour is from a sound. It 'represents' the real-object in the sense in which a member of Congress represents his constituency; *i.e.*, it acts for it and is responsive to its changes. We have such representation in the rise of a column of mercury, which represents the temperature of the air surrounding it; and in the motions of the hands of a clock, which represent the positions of a point on the Earth's surface in its rotation about its axis. But in the case of the brain we have a vastly more elaborate mechanism of representation—*i.e.*, of variation concomitant with variations in the outer world—and we have these representative elements serving as cues to the organism in its behaviour toward the represented objects.

The second point to emphasise is that a representative realism does not imply a dualism of substance. There is, I believe, one homogeneous world-order, in which perceived-objects are as real as real-objects, and not ontologically different. In this world-order certain groups of qualia are so causally related that group B varies responsively with group A. The representing qualia (group B) are elements in a continuous natural process with the represented qualia (group A). But there are two sets of qualia, not one; and it is the second set that is the perceived-object. Perceived-

objects then are as real as real-objects ; but they are not those particular real-objects which they represent. They figure in that particular context as contrasted with the reality beyond the organism of which they are the remote effects ; but if we were to make them in turn the objects of our perception they would figure as real-objects, in contrast with a new set of representing qualia, a new perceived-object, which we should call a brain-event. Thus there is no absolute cleavage into 'physical' and 'mental'. Representation in perception is just a power, acquired on an elaborate scale by the brain, of variation concomitant with the variations in external objects, which results in a minute adaptation of the organism to them.

But how can we say that perceived-objects exist in the brain, when they so obviously exist outside the brain ? Here is where most people balk. Yet it is because they do not get all the way into the theory. Of course the statement would be nonsense on an epistemologically monistic theory ; but it is precisely an alternative to that theory that I am maintaining. If when we looked at a brain our perceived-object (brain cells in motion) were the reality existing at the brain-point in the world-order, then that reality obviously could not be, *e.g.*, a perceived-tree. But let us be thoroughgoing in our position. Just as the perceived-tree is a set of qualia existing not at the real tree-point but at the brain-point, so the perceived-brain-event is a set of qualia existing not at that brain-point, but in the brain of the perceiver of that first brain. That is, the qualia in terms of which we think of brains may be as unlike the qualia existing at the brain-point as the qualia in terms of which we think of trees may be unlike the qualia existing at the tree-point. A perceived-tree is truly outside of a perceived-brain ; if our perceptions are truly representative, the real-tree is then outside of the real-brain. But the perceived-tree may well be inside the real-brain. And our identification of perceived-objects with real-brain-events is made particularly plausible by the fact that perception-brain-events must obviously have a relation of correspondence with their outer stimuli, while perceived-objects (if they are not identical with) must have a relation of correspondence with the real-objects of which they are the effects and 'representatives'. On our theory we have really but one correspondence, described first in terms of representative perceived-objects, and then in terms of the real-objects represented.

The difficulty in grasping this possibility lies in the fact that we irresistibly think of our representing qualia (per-

ceived-object) as existing where the real-object, the represented object, is. For we are interested in them not *qua* existences *in se*, but *qua* representatives of the objects beyond us, the things we point to and move among, which have such power for weal or woe over us. Nothing is to be gained for practical purposes by making this discrimination, and so practical man has not discovered it. There is nothing in this indiscrimination of practical experience to make against the theory. The quality of out-there-ness belongs to our representing qualia just as truly as colour; it implies nothing directly as to the place of the group of qualia in a world-order. On our theory this quality (produced at our end of the perception-mechanism as truly as any other) represents the real spatial relation which the represented object bears to our organisms. If one will repeat several times the time-honoured experiment of shaking the eyeball, one can soon learn to think of this dancing set of qualities—colours, forms, appearance of distance, etc.—as a picture of (but do not take the word to mean a copy of) the realities beyond one, which cannot be conceived to dance when one shakes one's eyeball. The representing qualia dance, the represented qualia remain still. How simple all these facts of the relativity of perceived-objects to the organism become on our theory; how puzzling they remain on any epistemological monism!

But now, if we accept the representative theory, we must admit that all we ever *have* is the representing qualia (perceived-objects). How do we know that there *are* any represented qualia (corresponding real-objects) beyond our experience? Well, we never can directly and absolutely know. Any form of realism must be content to simply believe in all that part of its universe which lies beyond the experience of the philosopher, with the justification that such a belief is necessary to explain the peculiarities of what falls within experience. Perceived-objects are notoriously fragmentary and not self-explanatory; they are broken pieces, as it were, like scattered fragments of an antique sculpture. Their shape, so to speak, and their recurrence at predictable times, are meaningless unless we assume a whole world-order of which they are a part. All forms of realism have to assume such a world-order. If a world-order can be conceived into which our fragmentary bits of experience will fit, and by means of which their peculiarities and their abrupt appearance within experience can be explained, we have the strongest ground for holding that that conceived order represents an actual order. The theory I

am maintaining is no worse off than any other realistic theory in its claims upon our credulity. If we believe in a more beyond experience, and if that right to believe where we cannot prove is granted, the only advantage of any one form of realism is that its conceived world contains more readily, without stretching or squeezing, the data of experience. So far as the prior question is concerned, it seems to me that we have exactly the same justification for believing in a total world-order that we have for believing, *e.g.*, in an actual historical process of evolution, in order thereby to explain the otherwise isolated and meaningless data of palæontology, etc.; or for believing in any theory whatsoever that goes beyond a mere description of observed facts. And as for the second point, I claim for representative realism the merit that it, better than any other form of realism, can contain and explain known facts. Therefore it is to me the most plausible metaphysical theory.

Perhaps the most striking advantage of the theory is that it enables us to understand what consciousness is. It explains its presence in a material world and shows its relation to the rest of the world-process. Consciousness is not a peculiar stuff, it consists of the same sort of elements that make up the rest of the universe. At certain points in this universe a mechanism has been developed which produces various sets of events varying concomitantly with events in the surrounding world. This representative mechanism is so connected with the motor-mechanism of the organism to which it belongs that it is able to guide that organism in its dealings with surrounding objects. The important aspect of consciousness lies in this peculiarly intricate and responsive mechanism of representation. Past events are represented—the representing qualia are what we call memories. Future events are tentatively represented. Absent objects, affecting the brain through various causal channels, are represented. These various representative elements interact and result in organic adjustments. The mechanism of memory gives to this group of elements a large part of its unity, which for the rest consists in the close causal union in which they are bound. The mechanism of perception transforms it from a reverie into a something that reflects and functions in relation to a wide environment. Consciousness is a group name for these organically interwoven elements—the most intricate and self-transcending (*i.e.*, responsive to and influencing events beyond it) bit of the world-process.

This sounds like a description of the brain-process. And

indeed, those qualia that make up our picture of a brain-process are precisely the qualia which would represent, in a perceiver's consciousness, the conscious-process (the real-object) perceived. When we think of that reality in terms of brain-cell-explosions, etc., we are thinking of it in terms of such representing qualia as a bystander would have who should receive messages from it through eyes and hands. In studying the brain-process we are really studying, through a glass darkly, *i.e.*, by means of representative facts in our own consciousness, this other consciousness. And just as the brain-process is seen to be a natural flowering of the evolutionary process, when we are talking in terms of the qualities things have representatively, for us, so consciousness itself, which we are all the time indirectly talking about, is a natural flowering of the real world-process. It is not a new substance or new relation added to the world, it is but a complexification of existing elements and relations. It is not an inexplicable 'awareness,' it is a group of elements which simply exist, as all the world-elements do. When we have described in full qualitative terms one such group of elements we have described one man's consciousness or experience.

For each of us is a consciousness. You and I are just such organic processes, set up at different points amid a less organised world. Of course the personal pronouns may be used to mean the total organism; but in their most significant use they denote a single conscious life, which is only a part of the life of the organism. Certain elements are so causally connected, and so furnished with a mechanism of memory, that a memory (a representing element) of any one of them is arousable at any time from anywhere within the complex. Whatever is within this complex can directly influence speech and the other consciously directed activities of the organism. Its very qualities can be remembered and thought about within that particular mechanism. In brief, whatever you can remember was something within that process, that consciousness, which is *you*. Whatever was outside that causally related network is not directly remembered, but only remembered, thought and talked about, "known," as it has been represented by some elements within it. Thus the 'egocentric predicament' is a natural result arising in a natural order, and is nothing to worry about or cause distress.

This scheme of things, which brings representatives, functional substitutes, of things into consciousness, but leaves the represented things outside, seems to me best fitted to

serve as framework for the facts of perception. It also is able to deal much more readily than an epistemologically monistic realism with illusions and ideas and all 'subjective states'. What to do with these bogeys remains an insistent challenge to that theory. Whereas on a representative theory they fit very nicely into the conscious-process and are to be discovered by science under the representative form of brain-events. But a development of this point lies beyond the scope of this paper, which limits itself to urging a representative theory of perception.



#### IV.—THE VEDANTIC GOOD.

BY P. NARASIMHAM.

As is the way by which men try to approach Me, even so do I receive them ; men in all their endeavours, Partha, are treading the path that leads to Me alone.—*Bhagavad Gita*, iv. 11.

THE problem of the Good as an object of study is one that is concerned with that Ideal of Life which gives it its true and full significance. Such significance is what can be fully appreciated only from a general philosophical point of view ; that alone can be the real Ideal which *at once transcends and permeates* the multiplicity of life activities. We find in modern thought two distinct tendencies that can be broadly characterised as 'scientific' and 'philosophical'. The former concerns itself with a mechanical unity arrived at from the standpoint of the 'many' and the latter with a study of the significance of the details from the standpoint of what it takes as a comprehensive and transcendent unity. Every philosophical position, we may assert, is an expression of the self-consciousness of man. For, man is capable of a peculiar self-transcendence and of forming a centre from which to study, being a unique centre of unity by himself. I take it as almost settled by the best thinkers on the subject that in order to attain the greatest comprehensiveness of view of life the latter view alone must be adopted. In other words, a theory of morals is best established only when it is intimately connected with a philosophy or metaphysic of Reality. No rational self-conscious being can be satisfied with a fool's paradise. It is therefore necessary that we should note the primary importance of an adequate standpoint in studying moral phenomena. More than to anything else, the divergences and controversies in moral studies are due to the differences in the standpoints of the various writers on the subject. The scientific or historical view of morals is too narrow and sometimes even too unpsychological to be taken seriously as the ultimate word on Life and its problems. The philosophic standpoint is unique in that the problems which it raises are peculiarly comprehensive as contrasted with the necessary self-limitations of a mere 'scientific'

enquiry. There is thus no *real* conflict between critical philosophy and critical science; for, the differences between the conclusions of the one and those of the other are due to the initial divergences in their standpoints and the questions consequent thereon.

The aim of this paper is simply to explain briefly what the meaning and value of Life are, and how certain ethical problems present themselves, from the standpoint of Vedanta that was taken up in the 'Vedantic Absolute' in MIND, N.S., No. 81.

From the Absolute point of view the ethical life, the life aspiring after a 'better,' is a life involving an 'opposition' between 'good' and 'evil'. Hence the ethical endeavour as such involves a 'contradiction' and is not expressive of the nature of the Real. Ethics is therefore of the 'appearance'. But this does not and should not imply anything subversive of morality. It is only a misunderstanding and misapplication of the Absolute doctrine that argues against morality. It should only mean that so long as the consciousness is involved in the dualism of practical normal life, so long as it has not evolved to have an immediate apprehension of the Unity, so long is it bound by ordinary ethical considerations. There can be no law higher than that of being true to oneself, to one's own Consciousness. Hypocrisy is the worst of evils, is the real sin against one's Holy Ghost. One must therefore be in a position to realise the absolute unity of Reality before one can be said to have transcended good and evil. This hypothetical state of Consciousness is not a chimera, but the verity of verities realisable by earnest endeavour; and Vedanta is built on the solid foundation of such consciousness. If we grant the possibility at least of this as a fact we can profitably pursue our enquiry further. It is in the light of such consciousness that we can understand what is to be known by the expression 'beyond good and evil'. For, at that transcendental level of consciousness one realises that everything in its way is an expression of the Absolute Good, and that our ordinary distinctions are petty because of the distorted point of view of the ordinary consciousness. Vedantic Ethic (if we may use this expression at all) consists then in gradually training an individual from a state of being involved in a dualistic position to one of monistic realisation. But we must first be involved in the opposition, speaking from the point of view of evolution, between good and evil, before we can aspire to get above it. For, the Absolute Unity of Vedanta is capable of being ap-

preciated only when one is a *true individual*; and individuality can develop only by the opposition between 'me' and 'not me'. The specific characteristic of mankind which Vedantic Ethic takes into consideration lies in this double nature of man—of being apparently involved in the opposition and yet of really transcending it. The 'beyond good and evil' is not the result of a mere make-believe, not the dream of a psycho-pathic brain, but the Absolute Good reproducing itself imperfectly in the many 'goods' of our relatively endless ideals. It is meaningless to suppose that Vedanta teaches that we should behave like a stone or a tree, or even a beast—the below good and evil. Only after the transitional stage of conflict has been passed through, only when our consciousness has 'sensed' the Unity, can we aspire after the beyond good and evil. There can be no self-conscious delusion anywhere and every one is the best judge for oneself in this matter. Until therefore the true divinity in us expresses itself, we should act as if the dualistic position which ethical life involves were real. When the Indian sage says, "I am Brahman, the Absolute," he means that this is an immediate fact of his consciousness, and it is not for the layman to deny it lest it should be like the blind man's denial of the glories of colour. The practical life of ethical endeavour is therefore a means and not an end in itself; and for one who has seen the 'beyond' to behave in a reckless evil way would be a psychological impossibility. In the name of Truth itself we should not deny facts of consciousness merely because we cannot comprehend them by our petty psychological theories. When we therefore speak of the Vedantic Good we mean that absolutely there is but one Good, the contradistinctionless Absolute itself, as the ultimate Goal, and that the ordinary ethical realisations are what, as involving contradictions, should merely be passed through as necessary preliminary stages for the ultimate realisation of the unity that ever is; for, at that level one sees no "other". The Ethic of Vedanta teaches us how to pass from this seemingly endless cycle of relative good to the Absolute Good whose *mayaic* reflection the former is. It supplies us with a standpoint from which we can study all our ethical endeavours gradually disappearing into their absoluteness, and by which we can cease to be merely ethical. It is this aspect of the so-called Vedantic ethic that we have to keep in view in order to understand its relation to the various other ethical systems. We should then equally be right in saying that Vedanta is not ethical; for, either, as being

based on an 'opposition' belongs to a thought 'lower' in level or less in a dimension, than the Vedantic that has to do with the 'beyond'. Vedanta thus understood is not subversive of morality, but the completion and crowning glory of a pure ethical life.

We are sometimes apt to think, from a survey of the different moral codes of the various peoples of the world, that since they do not apparently supply a clue to any ideal unity, the moral phenomena are mere natural events born out of the fiction of spontaneous variations which has formed an integral part of a purely material theory of evolution. In being dazzled by the mighty mechanism of the universe-process our philosophic sense of insight sometimes becomes blinded; and we are unable to get out of its enchanted circle. Did we exercise for a time the prerogative of our self-consciousness (limited though it be)—because it alone gives us true insight when rightly used into the nature of things,—we should see the apparent self-deficiency of our evolutionary theories. I do not for a moment mean that it is possible to convince others of the importance and reality of the philosophic standpoint which alone opens this line of inquiry; it is not what can be imparted from outside, but what must be born from within. It must be presupposed for our present purposes. It is only at a particular stage in mental evolution that man becomes a fully self-conscious being able to guide himself. Before that, man as the primitive man, must have been taught to do things which he could not have learnt himself. In fact he is just like the child who having no initiative of its own, learns first by imitation from elders and thus builds foundations for future progress. So the natural explanation of some of our anthropologists sometimes involve psychological miracles. The historical study of primitive human institutions even as they are understood as obtaining in modern savages must, in order to be valuable, be accompanied by philosophic insight. We can then say that primitive man was not so helpless a being as we fancy him to be, but that ever since the earth became habitable there were always highly cultured human beings as pioneers side by side with savages even as we see them at present. From a study of savage traditions and civilised epics we may rather say that the modern savage represents more a type of degeneration than one of human origins. It may be truer still that the primitive man like the child had actual external help given him, being in greater need of it than ourselves because of his less developed self-consciousness,—the probable fact underlying the 'savage' belief that in those early

days gods lived and moved with men.<sup>1</sup> Understood thus the gradual unfolding of human possibilities which we call history is one of intense interest as revealing to us in the highest sense the spirit of what we may call evolution, evolution of not mere form but of form as revealing an evolving life. For, evolution of form is because of the evolution of Life or Spirit and not *vice versa*. It is in this light that we are to understand the various human institutions and human endeavours as progressive manifestations here and there according to 'circumstances' of the ever evolving Life of the universe. This is the spirit of the opening verse of this paper. It is for lack of this insight that merely anthropological studies are often partial and enigmatical. History must therefore be combined with philosophy and psychology, that it may have any real value. It cannot be merely mechanical. The divergences in moral life are not therefore the despair of the moralist but rather the hope and possibility of future regeneration. The Vedantin for one is not perturbed by these differences, but sees one implicit mighty unity with its explicit infinite variety in all of them. The psychology underlying the Vedantic tolerance is that all desires and ideals express endeavours towards some kind of self-realisation—the 'appearance' here 'below' of the unity of the Absolute Self 'above'. "The righteous worship Me, O Arjuna, in four ways; they are, the afflicted, the seeker after knowledge, the seeker after objects of enjoyment and the wise, O best of Bhâratas" (*Gita*, vii. 16). These are different kinds of self-realisation, in the first three of which the self sought is limited; in the last, of the wise, the self sought is the One Self of the Universe. Hence, "Of these, the wise, ever harmonised, with One object of worship, are the best; I am dearest to the wise and they to me. It is well with all these seekers of Self, but I hold the wise as verily Myself; he, at one with the Self, is rooted in Me, who am the supreme Path" (*Gita*, vii. 17 and 18). Such is the basis of the unique tolerance which is the characteristic feature of a true Vedantin; for he knows in a very fundamental way that Virtue is Knowledge, that what one chooses is what one knows or believes to be one's *alter ego* (so to say philosophically). But this does not mean that he is apathetic to what we know as 'evil,' but that the so-called evil is what is to be good and is ever becoming good; for 'evil' emphasises its internal 'contradiction' whose gradual elimina-

<sup>1</sup> Stories from Hindu Puranas go to show that previous systems of worlds or Kalpas supply for a succeeding universe the fruits thereof in the way of highly evolved beings for the guidance of its earlier humanities.

tion makes of it more and more good. For the Vedantin, the distinction between good and evil is one of degree; evil is only less of good and is ever evolving into the Good in the Appearance-world. For him, ethically speaking, the world is a process of becoming good; and he, feeling at one with its Spirit, co-operates with the process. There is thus no inactivity in him, but on the other hand a field of never-ceasing activity for the Good. We must at the same time keep in view the peculiar standpoint from which the Vedantin acts in the world-process itself. It is in this connexion that we are to understand the statement that the true Yogi, Vedantin or Brahma-vit, is both active and inactive. "He united by Yoga, purified by Self, conquered by Self, whose senses are controlled, whose Self is the Self of all beings, though acting is not affected" (*Gita*, v. 7). He is active as we all appear to be active; but in himself being at one with All, he is not active, for, being above the oppositions of actor, act and the acted, the predicate act cannot rightly be ascribed to him. This is the spirit of what is known as Karma-Yoga in Vedanta, of Yoga which teaches us how to act. When Vedanta speaks therefore of inactivity, it is with reference to one's own conscious attitude that it so says; it is not a doctrine that inculcates stony passivity leaving the world around to rack and ruin. Says the *Gita*, "As the ignorant act from attachment, O Bhârata, even so let the wise act but without attachment keeping in view the integrity (or solidarity) of the world-process" (iii. 25). (Attachment is a technical term used to signify the ordinary man's identification of himself with the limitations of an actor in a given situation.) "At-one with pure Wisdom (Spirit) one transcends both good and evil deeds; strive therefore after this At-one-ment. Yoga (At-one-ment) is dexterity in action" (ii. 50). There is no opposition between higher and lower duties in Vedanta. Whether one be a king or a peasant one can equally be a good Vedantin; a duty is just a duty however mean its object be (as we with our meaningless distinctions would say). With the absolute vision one sees each in its proper place as expressive of the Absolute. Whatsoever happens to be done by us, we should do it with all our heart, with all our soul and with all our might, but yet with perfect detachment. Such is the action of a true Vedantin to whom one's duty perfectly done is as good as any other's. The eighteenth chapter of the *Bhagavadgita* says: "Man reaches perfection by being concentrated each to his own sphere of action (duty). Listen how one becomes perfect by being attentive to one's duty. By worshipping Him

from whom all these things proceed, by whom all this is permeated, each according to his duty, men obtain perfection. Better is one's own duty though mean than the well-executed duty of another. Doing what befalls one as one's duty according to one's nature, one never reaps any evil. A duty due to one's own nature, though defective, one ought not to abandon, O Kaunteya; all endeavours are pervaded by evil (an internal contradiction) as fire is by smoke. He whose will is everywhere unattached, whose (personal) self is controlled, whose desires are turned back, realises by renunciation the supreme perfection of transcending action (or duty)" (45 to 49). "He who does an act of duty because it ought to be done, without attachment and desireless of fruit, is pure (or perfect) in his relinquishment. (This is the true inactivity of a Yogi.) The relinquisher centred in purity, wise and with all his doubts destroyed, neither hates an unpleasant act nor is attracted to a pleasant act. It is not possible to completely cease to act so long as we are embodied; he who denies himself the fruit of action, is the true relinquisher" (9 to 11). This is accomplished not by a psychological somersault, but by the expansion of consciousness which every one has to verify to oneself.

The ordinary ethical consciousness from the Vedantic point of view is thus one which, appearing during a particular period of human evolution, must necessarily disappear into a beyond good and evil. Vedantic Ethic as distinguished from ordinary ethical systems takes up the instruction of man when he dimly perceives the unity of Life, and when he has sufficiently done with the ordinary notions of right and wrong, and gradually trains him towards a clearer apprehension of the unity by asking him to behave as if he is feeling the unity actually. This is not preaching self-delusion; it has as its basis the fact that function inchoate at the beginning creates its own proper organ of perfect perception or action.

Further, the ethical consciousness presupposes a peculiar freedom, a freedom of choice (whatever our psychologists may say of the mechanical phase of it) which is only the aspect of self-initiativeness resulting from self-consciousness. Man being a self-conscious creature, representing in miniature the cosmos—from the Vedantic point of view a microcosm—has in him 'reproduced' within varying limits the freedom-aspect of universal Spirit. This may be called his natural freedom which is the presupposition of ethical life. This does not mean going counter to psychological laws, but working with them for one's own ends. The germ



of this may be seen even in some specially trained higher animals. When we are working for a physical result ordinary natural laws do not stand in our way as obstacles; on the other hand, even working with them we master nature. So also with the natural laws of psychology. The ability to master the latter is due to the fact that the real man is higher than what we know as the mind. Thus psychological determinism and freedom are not opposed to each other—each being intelligible only in the light of the other—but are rather different aspects of the same fact according as it is viewed from the lower, external and mechanical, or the higher, internal and teleological point of view. It is only in man that these two show their explicit nature; whereas in the lower kingdoms, because of the absence of the inner point of view, neither of them can be said to be. This natural freedom of man is what can be said to exist not only when he chooses right, but also when he chooses wrong, its cognitive counterpart being what we know as the unity of self-consciousness. Higher than and transcending this natural freedom is the spiritual freedom which Vedanta teaches as the specific quality of evolved consciousness. The very object of Vedanta is to enable one to realise one's higher transcendental nature which makes of one a being both of and above nature without contradiction. The *Gita* says plainly that even a Yogi, one who has realised the Unity, when working with matter, physical or psychical, works only by taking its laws (as expressing the Will of the *Isvara* of a system) into consideration. He cannot be a perpetual miracle-worker suspending natural laws to show his powers of mastery and freedom. "Even the man of Wisdom acts in conformity with the laws of his psychical nature. All creatures follow their own nature. There is no place for suspension or restraint (of these laws of nature)" (*Gita*, iii. 33).

It now becomes apparent that the various ethical systems are not completely wrong, but express the morally evolving life in its various gradations. The greatness of the universe is its variety; absolute equality is the disappearance of the world itself. The Vedantin knows how to sympathise with our various endeavours. Vedanta inculcates individual freedom—the only necessary condition for true freedom,—and is against aggressive proselytising spirit; it does not see any change as valuable except when it is a result of psychological development. It respects the varieties of the world knowing that variety should be for the very being of the world. Hence alone it requires that one ought to respect

one's duties due to one's station in life as one in the many, and yet that one ought to internally realise the unity of the whole. A true Vedantin cannot be a useless burden on earth, but rather the specimen of the best of the citizens of the world; he works with the world trying where possible and necessary to lift it without confounding it. The error of the various ethical systems when they get to criticising their neighbours is their intolerant vanity to assume absolute values for themselves. In recognising different degrees of comprehensiveness in our ideals we should not lose sight of the progressive historical value of each. Even Vedanta with its peculiar comprehensiveness cannot be made universally applicable to all as they are; for it is, like other ethical theories, dependent upon the psychological predispositions in the individual with reference to which alone it has value. In the history of the evolution of Spirit all the theories represent the various phases of its gradual unfoldment. But, again, this should not lead us to misunderstand the Vedantic position as a mere inert æsthetic contemplation of the world-process; it should only imply that the Vedantin, feeling unity with the world-life, sympathises with the variety of its progressive character and actively co-operates with it for the End. The Vedantin, so to say, is able to simultaneously live in two 'worlds,' the world of appearance and of Reality, because of his richer consciousness, and to function the better in the former for his very knowledge of the latter. The true Son of God hath not where to lay his head in idle rest. He is a blessing wherever he is, for he alone knows the secret of true activity. "Yoga is expertness in action" (*Gita*, ii. 50). He makes no distinction in duties; one's duties are as divine to one as other duties to others. "Better one's own duty, though devoid of excellence, than the duty of another excellently performed; better destruction in one's own duty. The duty of another is dangerous" (iii. 35).

Ethically man is a microcosm with the particular aspect of conflict between 'good' and 'evil' tendencies well emphasised in him. Man is specifically an ethical animal, though we may admit that some of the higher animals also show signs of this characteristically human quality. Of course this only shows that there are no gaps in nature; but it cannot be used as a means of explaining away the ethical problem by tracing its origins to the lower kingdom. 'Before' man there is not, properly speaking, the ethical conflict, and 'after' man also it should 'naturally' disappear. The basis for our taking up this position lies in a proper and unprejudiced appreciation of human nature in

all its graded variations, of what we should take as true psychology. If there are any errors in our philosophies they must ultimately be due to our erroneous systems of psychological sciences. Modern psychology has degenerated into a branch of physical mechanical science. It leaves facts that it cannot explain without explaining away, as hallucinations and things of that ilk. We sometimes get satisfied, strange to observe, with mere words which, instead of explaining, merely prevaricate. The late Prof. James protested in the name of truth and fair-play against the unscientific indifference and even prejudice of modern psychology towards certain phenomena of consciousness which he roughly brought under the head of religious experience. Many more "psychical" facts there are which some psychologists dread to think of, like little children fearing strangers. Until this 'scientific' bias is got rid of we should be postponing the days of enlightenment. Anything abnormal is now labelled along with subnormal and pathological. Unfortunately, with rare and valuable psychological phenomena, unlike physical events, we cannot make others acquainted, because they are one's own property, as we say; and this very rarity of their occurrence is used as an argument against them instead of against the narrowness of our ordinary conceptions.<sup>1</sup> If our modern psychology were more adequate, many of the problems of philosophy would find their solutions very easily. The ethical definition of man, then, is dependent on an adequate psychology, and for purposes of Vedantic Ethic we shall take man as double-natured—the most general of the Vedantic studies of human nature—as mortal soul and immortal spirit (the lower and the higher self), the physical body standing not as an independent conscious principle, but as part of the mortal self, since its sole function is to serve merely as the medium of expression for the true Self of man in the physical world. The very end of ethics is just the perfect unification of this double nature in man. "Let one raise the self by the Self; let not the self be depressed. For, verily the Self is the friend of the self and also the Self the foe of the self. The Self is the friend of the self of one by whom the self is controlled by the Self. The Self is verily the foe of hostility to the not-self (the uncontrolled self)" (vi., 5 and 6 of the *Gita*). This conflict is due to the usurpation of the nature of the higher Self by the lower in this world of apparently absolute divisions and hence of delusion.

<sup>1</sup> We understand anything only by a sort of transcendence; the higher alone can understand the lower and not *vice versa*.

The 'essence' of man as the higher Self is identity (for want of a better term) with the Divinity in nature. He is an eternal self-conscious ray of Isvara, or God of a world-system, manifesting, though unconsciously to himself, to the extent of his limitations the glory of Him from whom all this is. But being deluded by the envelope of Māya in which he is, he identifies himself, through Avidya or ignorance, with parts and isolates himself from everything around. With the birth of Vidya or true knowledge he realises his true nature as one with the Divinity. Man thus is an evolving spiritual unit for ultimately realising the true Self through certain phases of pseudo-selfhood. In the Absolute Self of Isvara (if we may use the expression) one and all are One in a way not expressible in our mortal words that have their proper place only in a mortal world. We, as men, are concerned only with this human evolution (which perhaps is one line of evolution in this infinite world), and what lies farther beyond is not to our immediate interests. It is on this human-divine nature of man that the Vedantic Ethic is based and specifically concerns itself with leading him beyond mere humanity, and hence beyond good and evil to true spirituality.

We are now in a position to understand in greater detail some of the most prominent aspects of the Vedantic ethical system. From a study of its literature we notice a very close relation between its metaphysic and its ethic, and also how the former is entirely based on psychology or facts of consciousness.<sup>1</sup> Psychology reveals to us the nature and function of the "elements" making up the complexity of human nature, and for ethical considerations nature is definable in terms of functions or functional values. If the psychological and metaphysical part of Vedanta be ignored we should be very far from understanding the drift of the Vedantic Ethic. It is perhaps this mistake that is to account mostly for the grave misunderstandings concerning such a work as the *Bhagavad Gita*. *Gita* is *par excellence* the all-round Vedantic work if we only know how to study it. The two extreme views regarding it, *viz.*, those of the orthodox Hindu on one side and of the "heterodox" Western Orientalist on the other, the one worshipping almost every word of it as god-given without ever caring to live any of its teachings, and thus realising its spirit in one's own con-

<sup>1</sup> In a sense Vedanta is out and out empirical; but it is not an empiricism of the sense, but of what may be called the Spirit, of a something transcending our ratiocinative faculty or intellection.

sciousness, and the other seeing in it nothing but a jumble of contradictions and psychological monstrosities, relieved now and then perhaps by a sublime thought, must be scrupulously avoided if we want to understand it at all. It is only by actual living and not by its words that we can appreciate its value. Still *Gita* cannot be considered as the gospel for all peoples indifferently; it appeals only to those who, like Arjuna to whom it is supposed to have been first addressed, are by their psychological equipment fit to take up the Nivritti path in Evolution.

There are two cardinal teachings of Vedanta which must be noticed now in order that the ideal which it sets up may be clearly appreciated. These are Reincarnation and Karma, which are very intimately interconnected. The true Man—called the *Kârana-âtma*, lit. the causal self—is conceived in Vedanta as the abiding *human Self* throughout successive incarnations which he takes for the evolution ultimately of the Ideal consciousness through various kinds of experiences.<sup>1</sup> This is not due to any express volition on his part, but to the universal law of Causation known as Karma which compels his rebirths because of the causes that he has generated in his past lives. It is because such causes are retained as dispositions in his true human self that he is called *Kârana-Atma* or causal self. On the realisation of the Ideal these causes lose their compelling force on him and he becomes Karma-free since he transcends this level of world-life. Hence it is that we find sometimes stated in Vedantic literature that this freedom from compulsive rebirths is the end or object of human life, though this way of putting the matter obscures the positive character of the Ideal. To state the matter briefly, reincarnation is due to Karma and Karma is due to ignorance or *avidya* of identifying oneself with one's mortal separating *upâdhis* or bodies of functioning. Getting rid of *Avidya* or attaining *Vidya* is the End. *Avidya* is useful for the building of individuality which alone makes possible the realisation of the Unity of the Absolute or *Vidya*. *Avidya* thus is the knowledge of the mortal world leading one to the portals of Immortality which is realised by *Vidya*. One consequently acquires *Vidya*

<sup>1</sup> The value of experiences for this purpose is to correct the errors of identifying the Self with any particular thing. Pain in the most general sense is only a consequence of such erroneous identifications. Ordinary experiences are thus taken as painful in Vedanta, because they obscure the true Self. A misunderstanding of this position led some critics to think that Vedanta, like Buddhism, was pessimistic. The criticism is certainly pessimistic in not taking the larger issues also into consideration.

through first knowing Avidya or differences and distinctions in things. We must remember that nature is continuous and that there are no absolute distinctions anywhere. To describe the Ideal fully we may say that it is the Knowing-Feeling-and-Acting the Absolute Unity in our lives. Karma thus ceases to be for the individual when he gets above the delusion of the duality or opposition of 'me' and 'not-me'. It operates only so long as the individual feels apartness and otherness, and disappears when they cease to be. Whether this feeling of separateness be due to a bad or a good karma (or action) it matters little for Karmic liability. A man thus transcends good and evil only when he is Karma-free, when he gets over death (and also birth). The practical distinctions between good and evil<sup>1</sup> have their justifications in that the essence of what we call good is tendency towards unification, and evil separation, though so long as both these are permeated by Ahamkāra or separative I-ness, the individual is karmically 'bound' and not 'free'. It is interesting to note that in Sanskrit "sat" designates both good and real, and "a-sat" both evil and unreal. Man, thus, can be and is the architect of his own fate, and Vedanta never was frightened by the nightmare of a rigid fate. The ability to take one's karma into one's own hands, however, implies that self-consciousness must have already sufficiently evolved; for, unless we know our limitations we can never attempt to transcend them to rectify them. What Vedantic ethic idealises is a condition above human self-consciousness which if we like we may express as divine consciousness. Our ordinary distinctions between good and evil, must, after serving their purpose, ultimately disappear into the one higher discrimination between the 'binding' and the 'liberating,' the 'illusory' and the 'real,' for purposes of the Vedantic life. The ordinary distinctions are conducive to personal happiness or misery (or heaven or hell of popular religions) as the case may be, but not to

<sup>1</sup> "Fearlessness, purity of heart, zeal after the Yoga of wisdom, charity, self-control, sacrifice, study of the scriptures, austerity, straightforwardness, harmlessness, truth, want of anger, renunciation, peacefulness, absence of meanness, compassion to all beings, uncovetousness, softness, modesty, absence of fickleness, prowess, forgiveness, fortitude, purity, absence of intent to do evil to others (mischief) and of pride—these are the qualities of one born of divine propensities. Hypocrisy, arrogance, self-conceit, wrath, harshness and ignorance are, O Partha, the qualities of one of āsuri instincts. The divine qualities are known to be for liberation, the āsuri (demoniacal) for bondage" (Bhagavadgita xvi, 1 to 4½).

the liberation which the Vedantin has in view. It is thus that Vedanta is not an ethic in the ordinary sense.

Thus the Ideal which Vedantic Ethic has in view is, positively speaking, one of Divine Solidarity of the world-life as a fact of one's immediate consciousness, when alone one has a right to claim to be above good and evil. Such a consciousness is in the course of evolution around us, and if not hastened in its realisation by special endeavour now, at least in the distant future it shall 'naturally' be as the 'one far off divine event' of the present normal humanity. Vedantic Ethic is only this special endeavour intended for those whom it may concern. It is this ideal, then, that lies at the back of the various maxims of conduct that have been given in books like the *Gita*. The same idea is conveyed by the teaching that we should lose our 'self' to find the 'Self'. The self to be transcended is our lower mortal separative personality, the illusory individual, and the Self sought after is the One Self of the Universe. The same is again what is meant by "deny thyself". The *Gita* says in plain terms that the Self, the Atma, is to be sought, because that is the only refuge. "But the man who rejoiceth in the Self, who is satisfied in the Self, and who is content in the Self, has nothing else to do (so as to obtain what he has not)." "Nor has such an one to obtain anything as a personal gain either by commission or omission; nor has he any vested interest in any being" (iii., 17, 18). The various ordinary ethical ideas, on the other hand, stand on just that illusory self as their basis that Vedanta wants us to transcend. Hence to speak of the Vedantic Ethic is a metaphor. It is not an end that Vedanta teaches us, but the End which all the world in reality, though unconsciously, is seeking—the true Self-realisation underlying the limited self-realizations of all our petty endeavours.

Now it becomes apparent that the 'Good' of the Vedantic Ethic, because it has no 'other,' involves no contradiction. For, the opposition between the 'real' and the 'unreal' is no true opposition, since the unreal is simply the non-existent, and we cannot say that non-existence is a kind of existence to be opposed to another kind of existence called existence proper. When one is asked to curb the passions and desires, to master the senses, to control the 'mind' or the lower self, it is the same idea of transcending separative consciousness that is ordained in each (and not merely a utilitarian end). For, the Real is not what is revealed by any of these; in a sense they are the 'slayers' of the Real. The *Gitaic* End is not an 'other' to us, be-



cause it is the Eternally Present; it is to be *realised*, not *acquired* by special endeavour. *Gita* is neither extreme intellectualism nor extreme sensationalism, but the consummation and fulfilment of both at once. The whole doctrine centres round 'desire,' the essential nature of the lower personal self; because, desire is in its various degrees of subtleness, so to say, the most powerful of our enemies, which blinds us from perceiving the true nature of Reality. "It is desire, it is wrath born out of Rajas (the essence of restlessness), the great consumer, the great polluter, that is to be known as our foe here" (*Gita*, iii., 37). On the other hand, well-subdued desires are likened to rivers, in the *Gita*, which entering the sea of Self, never can overflow it (ii., 70). It is not a psychological miracle that we are asked to perform but what is perfectly possible psychologically only when we truly understand ourselves. *Gita* does not preach stony passivity but the highest kind of activity that we are capable of. That is the meaning of the terms "unattached" or a-sakta, "Self-united" or Yukta, that we find constantly occurring in that little book. It is in this light that the doing of duty for duty's sake is inculcated therein. Any activity, good or bad, which one refers to oneself as proceeding from one as a separate entity, is binding and one becomes karmically responsible. But it is a mistake to suppose that Gitaic ethic teaches irresponsibility; for such a supposition lowers the ideal to the level of the beast instead of elevating it to "above humanity". It is the expansion of consciousness as witnessed by one's own 'experience,' and not its contraction, that the Ideal implies. Such errors are illustrations of the complete misunderstanding of the fundamental position of Vedanta (due probably to being misguided by words-without-ideas), and tend to lead to disaster both to the individual and the society in which one lives. So long as the mind is free from self-sophistication there can be no danger. Now that owing to rapid and constant means of communication there has been a greater impetus towards greater self-consciousness in the individuals and sympathetic unity in humanity, it is good that all cultured persons should be acquainted with this "higher" ethic.

The eleventh chapter of the *Gita* taken in conjunction with stories from Indian Puranās throws a peculiar light on the Ideal. Man may be taken as the stage representing the beginning of Cosmic life. The human soul is to develop into an individualised centre in the ocean of consciousness in which it lives and moves and has its being, and which is the Isvara of the system itself. It is to lose all sense of separate-

ness being immediately conscious of the total life. Such an Isvara or the one Divine Man containing the results of the Evolution in past systems in the shape of other divine beings as parts of Himself, is what is depicted in a somewhat poetic form in the chapter referred to ; and the purpose of the present Evolution is to bring into existence an Isvara like unto the former for carrying on the evolution in future Kalpas or systems ; and we, as self-conscious units are to take part in it by becoming "parts" of the Divine Man who is now in evolution and who is thus One-and-Many-in-One. Such is the one mighty Individuality that is in course of preparation ; and taking part in that mighty Spiritual Co-operation is dependent upon our ability to transmute our petty personalities into pure individualities with the immediate consciousness of unity ever thoroughly permeating it.<sup>1</sup> This is the Supreme Path referred to in the *Gita*. It is the transmutation in a sense of the petty personal Karma or activity into the Cosmic Karma or universal action. There is thus no room for any stony passivity as is imagined by some critics to be the ideal taught in the *Gita*. Something illustrative of this harmonious blending of individuality and unity is what is vouchsafed as a fact by the experience of the world's greatest seers and sages. "I and my Father are One" is the eternal fact of the evolved supra-human or divine consciousness, described in diverse ways by the very fact of the inapplicability of our mortal words to adequately convey the meaning. An 'ethic' preparatory to this End is the Vedantic Ethic.

We may describe the Vedantic life yet again in other words. The Ideal as At-one-ment with Spirit is possible only by the transcendence of the limitations of nature, identification with which is the cause of pain and evil. Transcending nature means getting above the three *gunās*—*sattwa*, *rajas* and *tamas*—making up nature. Whence follows what Vedanta knows as true activity called inactivity technically—*Sanyāsa* in Sanskrit. The following verses from the *Gita* are clear on the point : "Setting aside all desires born of the mind (the lower self) O Partha, one who is satisfied in the Self by the Self, is called firm in resolve. Having no attachment anywhere whether yielding pleasure or pain one who is neither glad nor sorry is called firm in resolve. One, acting with the senses free from attractions and repulsions and subdued by the Self, and with his (lower) self under his control, obtains peace. He who renouncing all objects of desire acts without any attraction to them, without feelings of my-

<sup>1</sup> Compare MIND, No. 81, p. 70.

ness or self-centredness, obtains peace" (ii., 55, 57, 64, and 71). "He who sees inaction in action and action in inaction, is wise among men, is Self-united, and the doer of all actions. He whose all undertakings are free from desires (personal motivations) and (personal) schemes, whose action is burnt (rendered inaction) by the fire of Knowledge, is called a true knower by the wise. Content with whatever is obtained, above all dualities, free from envy, equal in success and failure, one though acting does not act. Him who being Self-united renounces all actions, whose doubts are solved by wisdom, who is full of Self, no action binds, O winner of wealth" (iv., 18, 19, 22 and 41). "Know him as the eternal renouncer who never hates nor desires; he who has no dualities, O mighty-armed, is easily freed from all bondages" (v., 3). "He who acts what should be acted without attachment to the fruits thereof is the (true) renouncer (Sanyasi) and the (true) Self-united (Yogi), and not one who (merely) gives up his (religious) fires and actions" (vi., 1). "He who does not hate things of radiance, of energy or of dullness (of *sattwa*, *rajas* or *tamas* in predominance) when present, nor long after them when absent; who, seated as unaffected, is unshaken by the qualities (stated above); who, saying to himself, "the energies (*gunas*) of nature work," stands apart immovable; who is equal to pleasure and pain, and self-reliant; to whom a lump of clay, a stone and gold are alike; who is the same to lovers and haters; who is firm and balanced in praise or blame; who is the same in honour and ignominy, the same to friend or foe, who has renounced all (personal) undertakings; he is said to have transcended the qualities (*gunas* of nature)" (xiv., 22 to 25). The attainment of the standpoint implied in these verses can properly be appreciated only by those who are already a little in the way towards such a life; for others the whole may appear as a valueless and even dangerous doctrine. This cannot be helped; for, an answer has value only with reference to the question which brought it into existence—a pragmatic test in the true sense, shall we say?

It will now be easy to see our way towards the solution of the vexed problem as to what proportion of altruism to egoism one ought to show in one's life. Altruism and egoism are opposed to each other only so long as the individual cherishes the slightest idea of separateness from the world-life around him. The aim of Vedanta being the development of a universal impersonal point of view and the sharing of the universal life, the problem itself ceases to be. Sacrifice is the law of higher life, sacrifice of the mortal, temporary and phenomenal to the abiding Eternal Unity. Sacrifice, Love,

and Spirit are but three names or aspects of the same unity of higher life. Where the individual and the Whole are one in Spirit, altruism and egoism would remain merely as names devoid of the content they properly have in a "lower" sphere of existence. It is only in the course of one's actual life as a practical Vedantin that one can fully realise the spirit of its teaching; and no amount of word-polishing would bring out its nature in a way completely intelligible to one unaccustomed to its mode of thinking. The ideal of Vedanta is *not a thing* which we can walk up to, pick up and carry always about us; the Mukta or the fully-blossomed Vedantin implies a constant state of consciousness that ever is and that has become the very core of his being. He is no doubt in a sense an abnormal being since he is now what the average man will necessarily be in æons to come. Hence the difficulty of understanding his full nature. But there is nothing queer or odd in his apparent external behaviour. The Vedantin may appear to us as a living paradox for the same reason that the world is a paradox for our purblind vision which, as it is, always sees things double. He is the fully developed Yogi, the beloved of the Lord (chap. xii.), the wisdom-seated (ii.), the Gnyani (vii.) that the *Gita* refers to in various places; for, the establishment of mental poise—yoga—implies as its basis this fundamental position of the attainment of the universal standpoint. This latter may appear impossible to us; yet we, as we are, have no right to deny its existence lest we should be displaying the vanity of our little-mindedness. It must be noted further that we do not go to the *Gita* to know our particular duties—for which even the *Gita* points to other authorities specially connected with a particular people,—but as to how, with what mental attitude, we are to perform what devolves on us as our duties that we may fulfil to perfection what is expected of us. It is a book for those who have done well their duties and seen the apparent endlessness of Samsâra or Karmic cycle so long as they are involved in it, and who therefore long to train themselves towards the higher consciousness wherefrom 'Samsâra' disappears and is realised as Mâya. It is, in other words, a treatise for the aspirant, the Mumukshu, one desirous of emancipation. This fact is important to bear in mind that we may appreciate fully the position of works like the *Gita* in philosophic literature. Humanity is like a mighty entrance-examination class for further higher activities in the infinite fields of Evolution around us which can be entered into only by first mastering the elementary lesson of the Unity of Life or Spirit.

Regarding the questions of God, Immortality and Freedom, these are more emphatically implied in the Vedantic 'Ethic' than perhaps in any other theory. What God means I have already explained in my paper on the 'Vedantic Absolute'. He, being absolutely the all in all for the universe that is Himself need not be specially invoked for ethical considerations. He is the beginning, the middle and the end of all beings in a way that we are not able even to imagine. He is not in Himself the god of the ordinary popular conceptions exhibiting a nature similar to our fleeting personalities, which nature is so assigned to Him by popular theologies, perhaps because it might serve as a progressive ideal for purposes of our progressive realisation. We are centres, so to say, in Him, reflecting His nature to the extent of our capacities; or we may say even that He is manifesting His nature through us. We are real in proportion to our share of His Life and Consciousness: we are and yet are not in the ocean of consciousness that is really Himself. Of Immortality again, we have in Vedanta the conception rather of the Eternality of Spirit. Vedanta does not believe in a Self having a beginning but no end; we may as well imagine a rope with only one end as think that the Self has a birth but no death. "Nor at any time verily was I not, nor you, nor these rulers of men; nor verily shall we ever cease to be, hereafter" (ii, 12, *Gita*). We may distinguish, however, between two aspects of immortality which are implied in Vedanta. The one is what is involved in the very idea of the persistent nature of the Self; the other is what is a consequence of the realisation of true Self-hood—the incipient or unconscious and the fully self-conscious immortality. The latter alone is what is sometimes looked up to as the End because of its essential implication in the Ideal. So long as one identifies oneself with one's fleeting personalities and hence is involved in the Karmic cycle, so long is one looked on as constantly dying and being reborn (of necessity),—at least that is how the incarnating mortal man feels. The Self becomes consciously immortal when it shares the Eternality of the One Spirit that it is by realising its true nature, when it passes above the ignorance-born travail of births and deaths. It is thus the felt immortality alone that is true immortality and not merely what is natural and of which we are unconscious. The whole ethic of Vedanta is what is based on the Eternality of Spirit, and hence we require no special mention of it except to show its technical meaning in the literature. The End therefore is not absolute extinction as some fancied in the term *Nirvāna*, but rather the perfect realisation of one's individuality;

this, however, implies the 'contradiction' and 'transcendence' of the mere personality which the average man always identifies himself with. It is perhaps the confusion between the 'true' and the 'false' man that is the cause of the error of misunderstanding the true nature of Nirvāna which is an inconceivably high level of Consciousness. If the term existence may be used at all, Nirvāna alone is true existence.

The more interesting problem is the one of Freedom. Of the natural psychological freedom mention has already been made.<sup>1</sup> But the freedom, Mukti, liberation or emancipation of Vedānta means something very much more. It is the characteristic of the liberated Self because of his attunement of his will to the Will of Isvara or God, and hence of its unobstructedness in the Universe. It is the highest kind of freedom which a human being can express. A rough simile from our ordinary experience may illustrate what it may mean. Suppose there are two persons who love each other so much that they do not feel 'separate' from each other. Then what one wills may be done by the other with as much willingness and pleasure as if one willed it oneself. This illustration reproduces in a very limited way the freedom that a Mukta enjoys with respect to the divine order of things. Whenever we speak of freedom any notion that we form of it must always be a definite one, a freedom within limits imposed either by oneself or by others; such an idea as absolute

<sup>1</sup> In certain cases of moral decisions we seem to feel a peculiar psychological factor characteristic of a sense of self-determination. This factor is not a mythical or non psychological element as some have supposed it to be, but the self itself as a higher centre of self-initiativeness transcending the given situation; because, the situation reveals a unique dual consciousness, one aspect of which is a sort of transcendental condition of the self asserting its own greater comprehensiveness. The experience is clearly one of evolved self-consciousness. The so-called will here is only another name for the dynamic nature of the self itself which has transcended the given situation. So long as we try to look for such a self in the "lower" situation we should be searching for it in the wrong place. Because some psychologists do not appreciate the peculiar transcendental condition of the self at the time, they do not see any way towards a psychological explanation of the situation. Further, the freedom of the will in this sense is not the same as capriciousness, but an embodiment of a higher law. To identify freedom with caprice is to confuse oneself. It is the self that can ever be free, and will is only the willing self. We must in cases of this kind distinguish the self from its situation physical or psychological which, being self-conscious, it always transcends. Such psychological states of tension are transcended by the perfected Self or Will since it involves no "opposition". Activity in such situations appears to be in the line of greatest resistance, because the self has to work against the determinism of the mechanism of a preformed situation.

freedom can mean nothing intelligible to us. We deal here with an explicit or manifested world, a world with dimensions and limitations. We must therefore understand freedom in relation to the universe in which we stand, and no better intelligible idea of it is conceivable than what Vedanta offers. Thus the Mukta is conceived as the liberated Self with reference to the necessity of Karma or unconscious external determination which once chained him to the wheel of cyclic appearances. Because, when the soul by its desires identifies itself with parts, it necessarily gets within the hold of the law which governs the parts within the whole and not the whole. When the Self realises its nature and sees its unity with the whole then the law has no hold on it. This is what is implied in the saying that true knowledge burns like fire the chaff of karmic bonds. "As the burning fire reduces fuel to ashes, O Arjuna, even so the fire of Knowledge reduces all actions to ashes (makes them unable to bind the doer)" (*Gita*, iv., 37). That is, the Self gets the absolute mastery of destiny which was hitherto holding it in thrall on account of its ignorance or Avidya. Liberation or Mukti, therefore, requires no other idea of freedom than what is implied in getting the mastery of Karma. It thus becomes clear that the mere natural psychological freedom which satisfies the ordinary ethical purposes is a mere appearance-freedom as contrasted with the real freedom which Vedanta postulates in the idea of a liberated Self.

We sometimes hear that the doctrine of Karma is against the possibility of any fresh initiative on our part, that it is against what we call our freewill. This position betrays a confusion. The problem is due to our taking Karma to be a rigid destiny and to our confusion between the Self and the not-Self. But what Vedanta means by Karma is not destiny but the result of the past actions in the present situation, both in the psychological and physical mechanism forming the environment into which we are born in the world. In fact the very being of Karma is possible only on account of a relatively free consciousness working on a previous occasion. As such it does not interfere with the peculiar self-initiativeness of the human ego due to its position and nature in the constitution of the world. What we make we can also unmake. It may, however, be true that Karma works more like destiny in the case of unevolved persons like savages and little children, but on the other hand it is very malleable in the case of an evolved ego. All that is meant is that Karma brings on certain situations which by Karma again are modifiable. In fact, Karma and freewill are not opposed to each



other when clearly understood, but form a set of relative notions, each being intelligible only in the light of the other. Karma is a law applying to the material or mechanism of a situation and does not bind consciousness or self. In the hands of an intelligent person karmic determination is no more rigid than the determination of physical external things by the operation of natural laws. Or again, to take an example from psychology, though past experiences determine our mental contents or material, still we are not hindered from making "ideal constructions"; we can even alter our habits of life if necessary. Psychological explanation itself implies the freedom of consciousness side by side with the determinism of the organisation. It may be that to one who knows more there may be facts which are inevitable karmically in their occurrence, and which he knows he cannot alter; still this need not and does not prevent him from working as much as he can against them. Though the odds be against us it is never our business to abstain from attempting to do what seems right to us. What Karma determines is not therefore the Self which ever is free, but the situation, and the situation stands only as fresh material for further reactions. As we are both 'material' and 'spiritual,' we are both 'determined' and 'determining'. Hence it is that in our aspirations after our ideals we need not reckon Karma as a paralysing and constraining force. Knowledge of the nature of Karma makes it our faithful servant as much as any other natural law. There is nothing to stand in the way of the real earnestness of the Self, for that is a 'ray' or *amsa* of God Himself.

There is still another similar apparent difficulty based on a metaphysical misconception. Freedom as I have already stated is intelligible to us only in relation to determinism. Of absolute freedom we have no other conception except that of the Absolute itself. Every attribute when made absolute becomes the Absolute, *i.e.*, it loses its ordinary practical or relative significance. Hence when we speak of absolute destiny involved in absolute omniscience, then since it is only with reference to the timeless, spaceless Absolute that we can think of absolute omniscience, such a destiny has too little to do with our appearance-freedom to be in any way conflicting with it. The Vedantin knowing by first hand that the explicit world is an "appearance" realises himself as absolute freedom itself though working in the limited world, and not, as we may suppose from our point of view, as having a (to him meaningless) freedom. We should not

confuse standpoints and raise problems which cannot and do not exist.

With this rough summary of the important features of the so-called Vedantic "Ethic," we may, in conclusion, attempt to see if the Ideal as put forward therein is not one which can stand a peculiar criticism which has been brought forward against ethical ideals in general, from the standpoint of certain metaphysical considerations of an absolutist nature. Ordinary ethical systems are pluralistic and they cannot be properly made objects of attack from the standpoint of an absolutely monistic metaphysic. The criticism is to the effect that no ethical ideal can stand the test of universality and comprehensiveness. The peculiarity of the Vedantic Ideal as distinguished from the other ethical ideals, as must have been apparent throughout our study, is just this very universality-and-comprehensiveness, due to its being based on a metaphysics which is 'monistic' or absolutist in its nature. We maintain that if the Vedantic ethical ideal be not universal and comprehensive, it is nothing at all. That is why it is only according to Vedanta the ideal that can be a true concrete-universal (for want of a better expression though it is a contradiction in our terms), which is just the desideratum of the other ethical systems. By a concrete universal I mean only just this universality-and-comprehensiveness itself. For, it is only in Vedanta that many-ness and one-ness are *not contradictories*, to put the matter in a paradoxical way. Since the Absolute alone is both concrete and universal, the Vedantic Ethic which takes the Absolute alone as Real postulates the same as the Ideal. But unlike other systems the Ideal is not merely ideal but realisable and realised every moment if we have but the adequate vision to see it. The true Vedantin knows that in the very limitations in which he is placed and is working, he to that extent is manifesting the Absolute that is everywhere and at all times; he is perfect in every sphere in which he works however humble the task may be, though we may not be able with our shortsightedness to perceive it. He has no duties and yet everything that he does he does as his duty. This possibility is due to the peculiar conception which Vedanta gives regarding what we know as the human Self, and to the nature of the Absolute itself which it postulates as the ultimate Reality. Absolutism well understood never undermines our morality; its function is rather to complete it.

## V.—DISCUSSIONS.

### ANALYSIS OF CATEGORICAL PROPOSITIONS.

I ASK leave to return very briefly to this topic, in order to answer some remarks in a Note by Dr. Bosanquet in *MIND* for January, 1914.

Dr. Bosanquet's Note may be divided into two parts:—

- (1) A consideration of the relation between my view of the analysis of Categoricals and Mr. Bradley's view.
- (2) A statement and evaluation of my view.

Dr. Bosanquet's position here may almost be summed up by saying that in his opinion I have put forward a view which is really Mr. Bradley's (*totidem verbis*), while at the same time Mr. Bradley's view is right and mine is wrong. That is, mine is wrong unless restricted to a special class of cases. (This is where the 'restriction' of which Dr. Bosanquet speaks, comes in.) The two issues (1) and (2) are distinct.

In order to settle (1) satisfactorily, it is necessary to ascertain precisely what Mr. Bradley's view is, and what mine is, and this is perhaps not a very easy task. When I first put forward in print what I will venture still to call my view—the view namely that the import of all propositions of the form *S is P* is Identity of Denotation with Diversity of Intension—I was very anxious to find myself in agreement with well-known writers on the subject, and in my *Elements of Logic* (1890) and an article in *MIND*, 1893 (pp. 441-456), cited passages from (among others) De Morgan, Mill, Mr. Bradley and Dr. Bosanquet, which seemed to me confirmatory of my analysis though not absolutely one with it. In *Elements of Logic* (footnote, p. 50) and *MIND*, 1893 (p. 451), I quoted from Mr. Bradley's *Principles of Logic* (pp. 28, 29) a passage very like that which Dr. Bosanquet now cites in *MIND* (N.S., 89, p. 102), and similarly passages from Dr. Bosanquet, and I was then under the impression that Mr. Bradley and Dr. Bosanquet would probably not object to the Identity-in-Diversity interpretation of Categoricals as formulated by me. The view which I was supporting seemed to me substantially in accord with certain pronouncements of these authorities. But as I have since explained in *Proceedings of the Aristotelian Society*, 1910-1911 (p. 166), though "I still feel that there is much similarity between what I try to say and what others have said . . . I now see that . . . the *exact* points of difference . . . are all-important, and, as far as my knowledge

and apprehension go, my analysis of *S is P* has fundamental differences from every other perfectly general analysis that any previous writer on the subject had formulated".

It does seem to me however that Prof. Frege's general Analysis of Categoricals (published 1892) as quoted—with approval—by Mr. Russell in his *Principles of Mathematics* (1903) is the same as mine. According to this, what a Categorical Affirmative Proposition—a Proposition of the form *S is P*—asserts is: Identity of Denotation (or Application—*Bedeutung*) with difference of Intension) (or Connotation or Meaning—*Sinn*). Frege gives as an illustration the statement that

The Morning Star is the Evening Star.

This account seems to be broadly similar to Mill's view that *WHAT-EVER* is denoted by (or has the Attributes connoted by) the Subject, has the Attributes connoted by the Predicate (*cf. Logic*, Book I., Chap. v., § 4, 9th edition, and *Examination of Hamilton*, pp. 497, 493, 4th edition). Here it is *WHATEVER* that secures sameness of denotation. Frege's analysis is however wider than Mill's by as much as *Sinn* is wider than Connotation, and it is this wider sweep which makes it, as I think, an absolutely general analysis, and universally applicable.

Perhaps my own view, as above indicated, of my attitude to Mr. Bradley's Analysis of Categoricals, may be thought not wholly divergent from Dr. Bosanquet's view of it, if allowance is made for the somewhat more favourable light in which I regard my own procedure.

I began (in 1890 and 1893) by quoting the strongest passage I knew of in Mr. Bradley's *Logic* in support of the identity-in-diversity analysis as I have understood it, and if what I then tentatively claimed for that passage was justified, this would be a most welcome confirmation of the view which I profess. But subsequently I could not feel sure that *any one* (until I became aware of Frege) did accept *precisely* my analysis. And as far as I know, it is not supposed to have occurred to any one except myself to make use of *S is P*, so analysed, as a fundamental logical principle.

I must, I am afraid, disclaim what Dr. Bosanquet thinks is "precisely my account of the judgment"—*viz.* (in Mr. Bradley's words): that "if you prefer to consider the identity of the subject . . . [rather than a connexion of different attributes] you read the judgment in extension". I do not in the least prefer the "identity of the subject" to "connexion of the differences"—in fact I hold that identity of Subject and Predicate in denotation (extension), cannot be asserted except as *identity in intensional diversity*. Correspondingly, connexion of different attributes can come off, only if they co-exist in some identity. Propositions of Science, cannot, any more than those of History, dispense with an 'identity' in

which the diverse attributes are at least conjoined. In fact it is often conjunction that suggests connexion.

In *S is P*, as I believe, the identity and diversity of Subject and Predicate are co-equal, and are both absolutely indispensable for significant assertion—one without the other is as futile as one blade by itself of a pair of scissors.

When (2) Dr. Bosanquet says (*MIND*, 1914, N.S., 89, p. 102) that the question in dispute between him and myself as to the analysis of *S is P* is one "of the very nature and meaning of Science, which consists in affirming laws of connexions of attributes" he recurs to the crucial criticism contained in the Note in the second edition of his *Logic*, where he complains that I deny "absolutely and in principle that one intension can . . . involve or imply another". This however as I have shown (*MIND* for October, 1913) is emphatically not my position. What I do deny (or at least doubt) is that in *every* proposition of form *S is P* a connexion of intensions is asserted such that intension *S* involves or implies intension *P*. (Of *S is P* or *not P* it can of course always be said that the intension of the Subject necessarily involves that of the Predicate.)

In the repeatedly quoted proposition:—

"My first penitent was a murderer"

can it be said that the intension of the Subject implies the intension of the Predicate in at all the same way in which, *e.g.*, equality of sides of a triangle implies equality of angles at the base? *Having equal angles at the base* FOLLOWS from *having equal sides* in all cases. But *being a murderer* does not FOLLOW from *being any one's first penitent*. *Conjunction* is no doubt affirmed in both cases, but necessary connexion only in the one, as far as I can see. Thus I hold that conjunction of intensions is indispensable in scientific as well as in historical propositions, but that necessary connexion or implication of intensions is explicit and seen to be inevitable only in those which are generally called scientific. *Whether* intensions are conjoined, is a different question from *why* they are conjoined, and also from *how* they are conjoined. *Is it true that* "Un giudizio è sempre la formulazione d'una legge"? Dr. Bosanquet says it is. I cannot see this. At any rate such formulation must be different in the case of historical propositions from what it is in the case of scientific propositions. But to admit this does not mean that my analysis is concerned *only* with what Dr. Bosanquet calls "irrelevant conjunctions"—that is, I suppose, conjunctions in which the intensions of *S* and *P* are not necessarily connected—(see, *e.g.*, pp. 530, 531 of my Note in *MIND* for December, 1913, in which I insist upon the prevalence and importance of uniformities of coexistence of attributes). Nor does it mean that I decline to regard systematic connexion whether in

the universe as a whole, or in restricted regions of it, as a *basis* (not a postulate) of all assertion.

Dr. Bosanquet ends his Note by saying that he has offered me in his *Logic* an eirenicon which I refuse to accept. What he thus offers is an account which, he says, "restricts itself to irrelevant conjunctions" of categoricals. This would in his view apply (but apply exclusively) to "such propositions as have for their subject an individual, or collection of individuals". The offer seems rather ironical, as (1) what I am interested in is a *perfectly general analysis*—an analysis of *S is P*, and (2) what Dr. Bosanquet would allow me here, in a restricted region, is what I would not accept anywhere. (I do not quite understand how far he would accept it anywhere himself.)

Either an irrelevant conjunction of intensions in *S is P* means first, merely that the intensions conjoined are not so connected that the one is seen or known to imply the other, or it means secondly, something different from this, something, I suppose, that is held to be more objectionable. But I do not know what this second meaning may be. In what other sense than the first is any actual non-scientific conjunction irrelevant (*e.g.*, in My first penitent was a murderer)? Dr. Bosanquet must, I think, allow that this and other historical propositions contain 'irrelevant conjunctions' in *this* sense. But (1) with such conjunctions thought certainly has to deal. (2) My analysis is not *restricted* to cases of this kind. (3) An analysis which requires necessary connexion of intensions is restricted to 'scientific' propositions.

The question is of a General Analysis of *S is P* propositions—an analysis which is applicable to every proposition of that form (such a general analysis cannot, of course, be exhaustive as regards particular species of *S is P* propositions). Is such a general analysis possible or not? If not, how account for the use, and usefulness, of the *S is P* form? Have propositions of this form nothing in common?—If on the other hand the form *S is P* is admissible, and for some purposes useful (compare  $a = b$ ), what other analysis is offered which is of absolutely general application?

Dr. Bosanquet seems to admit that some propositions (*e.g.*, My first penitent was a murderer) do not present us with a necessary connexion of intensions in the same way as, *e.g.*, An isosceles triangle has the angles at the base equal. If so, an analysis which is applicable to cases of such necessary and obvious connexion of intensions as the latter, is in the present state of our knowledge not applicable to *all* propositions.—But the identity-of-denotation-in-diversity-of-intension analysis *is* I hold applicable to *ALL S is P* propositions, and very emphatically applicable in the case of 'scientific' propositions since the connexion of intensions being unalterable, they not only *do*, but *must*, wherever they occur, be conjoined in one and the same denotation. And in concrete scientific propositions the primariness of the *connexion of intensions* is clearly

brought out. In *e.g.* All isosceles triangles have the angles at the base equal, it is evidently the connexion of intensions (which carries denotational unity) that justifies the applicability to *all* denotations. We can never have examined all the cases included in a universal statement, but we can be quite certain that *if* equality of sides involves equality of angles at base, then *wherever* there is equality of sides, *there* there must be equality of angles at base; the two equalities must co-inhere: unless they occur in one denotation, they cannot occur as connected. On the other hand, when we find a conjunction of attributes, but do not see or know that there is any inseparable connexion between them, we may believe that further knowledge or deeper insight would reveal inseparable connexion—but we are, so far, not entitled to assert it.

I can only suppose that what remains as the difference between Dr. Bosanquet and myself as to the analysis of *S is P* is this, that he regards *S is P* as meaning in all cases (*i.e.* as involving, if we assert *S is P*) that the intension of *S* does actually imply the intension of *P*—in other words, *S is P* always formulates the law that intension *S* necessarily implies intension *P*—that in *all* propositions of form *S is P*, we are asserting that: *Intension S implies intension P*. This I cannot accept. And in such cases as: An isosceles triangle has the angles at the base equal: where the intension *S* does imply the intension *P*, the implication is in virtue not of the FORM *S is P*, but of the content or known 'intensions' of Subject and Predicate. Again, in any case in which *S is P* stands for a universal affirmative—All *R* is *Q*—All crows are black—it is in virtue of the sign of quantity *all*, that we regard the proposition as 'formulating a law'. What law can we suppose to be formulated by: My first penitent was a murderer, or This violet is white, or Janey has cut her finger, or The coffee is too sweet? No doubt we regard every event as caused, but what we wish to assert when we make statements is not always and exclusively laws of causation, proximate or remote, nor even laws of any sort. And if Dr. Bosanquet holds that in *every* Proposition of form *S is P*, what is asserted is connexion, as distinguished from *conjunction*, of intensions, is it open to him to insist (as I understand him to do) that the distinction between Categoricals and Hypotheticals (= Conditionals) is of great importance? And would he say that in negation—in propositions of form *S is not P*—it is only necessary connexion of intensions, and not their mere conjunction, that is denied?

I am grateful to Dr. Bosanquet for affording me this opportunity of a further attempt to reach clearness of statement and a better understanding—also for the measure of generous approval which he gives to my suggestion that the form *S is P* should be adopted (rather than *A is A*) as representing significant assertion.

E. E. C. JONES.



#### DR. ALEXANDER ON MIND AND ITS OBJECTS.<sup>1</sup>

THE leading exponent of English neo-realism has lucidly expressed his basal principles in his reply to Dr. Bosanquet's Adamson lecture; I venture a few comments on Dr. Alexander's views as to the nature of Mind and its relation to its objects.

(1) It appears difficult to understand what is the exact significance of the "Starting point of realism," so far as the relation in question is concerned. "Mind and its objects," says Dr. Alexander (p. 5), "are connected together by the relation of compresence," where compresence does not imply "coexistence in the same moment of time, but only the fact of belonging to one experienced world"; *i.e.* apparently, since temporal coexistence is not implied, the special meaning of "compresence" here seems to be "*experienced*"; mind and object together constitute one whole—complex—world—which is an *experienced* world;—consciousness being then enjoyed, and the object contemplated.

But Dr. Alexander's further development of the meaning of compresence is not easily harmonised with this initial standpoint, for we have (p. 6),—"our compresence" (in this special sense which implies "*experienced*") "with physical things . . . is a situation of the same sort as the compresence of two physical things with one another . . . my consciousness of a physical object is only a particular case of the universal compresence of finites"; and the question here is: Can we speak of (*a*) "compresence of mind and object in one experienced world," and (*b*) "compresence of physical things with one another," and use "compresence" in both cases in exactly the same sense, unless we mean by it in both these instances nothing more than merely temporal coexistence? For in the first case experience—an experienced world—is the fundamental feature; and if this be then retained in the second case, we appear to be at once committed to some kind of panpsychism—which indeed seems to be Dr. Alexander's own ultimate position; for he would allow "a physical thing to know," though not to be a mind (p. 32); and while panpsychism is of course a tenable metaphysical position, it must, I think, be admitted that it confuses the more strictly epistemological issues. Epistemology is concerned in the first place with human knowledge, and if it be "legitimate

<sup>1</sup> "The Basis of Realism" (*Proc. Brit. Acad.*, vol. vi.).

always to say that a material thing knows" (p. 33), then it seems necessary to use in epistemology at least some term other than "knowledge".

(2) If on the other hand we reject panpsychism, it is difficult to see how "compresence" of mind and object, if it be really only one instance of universal compresence, can be anything beyond the simple temporal coexistence of these entities; and in fact Dr. Alexander says (p. 10) that "there is nothing peculiar in the relation itself"; after defining, *i.e.* compresence as specially implying experience, he adds that there is nothing peculiar about compresence in itself; and proceeds—"what is peculiar in the (mind-object) situation is the character of one of the terms, its being mind". But if the essential and peculiar characteristic of the mind-object situation be thus transferred, from the relation between these terms to one of the terms itself, what then becomes of their relation? What peculiar character can remain to it? Admittedly none whatever,—the peculiarity pertains to the mind; but since at the same time the relation is not abolished, there can remain to it in itself no other character than that of temporal coexistence, as between the special entity mind on the one hand, and its objects on the other. That is, the only meaning it appears possible to give to "compresence," is that which Dr. Alexander would minimise, if not entirely exclude.

(3) "What is peculiar" then, in the mind-object situation, is not the relation between them, but "is the character of one of the terms, its being mind or conscious" (p. 10); and here again there seems to be some difficulty in harmonising Dr. Alexander's various assertions.

Commencing with the most definite of these, we have (p. 14)—"It is clear that consciousness cannot be a relation"; the relation which does exist is the "togetherness" of consciousness (thus negatively defined) and object; this is the cognitive relation;<sup>1</sup> and in consonance with this (p. 24), "being known, or knowing, is a relation"; whence it at once follows that knowing cannot be in any sense the same as consciousness, and we have the curious but logical result that to know a thing, and to be conscious of it, are not the same;—knowing is a relation, but consciousness is not.

A further difficulty arises: "In the experience (p. 14) the perception of a table, the terms of the relation are the table and the perceiving consciousness. The relation involved . . . is neither the table nor the (perceiving) consciousness but their togetherness." Now the case is of course precisely similar, if for "table and perceiving consciousness" we substitute "proposition and knowing consciousness"; and then "The relation involved is

<sup>1</sup> But, as just noted, consciousness, merely as an existent fact, is also "together with" every other real existent, whether cognised or not.

neither the proposition nor the (knowing) consciousness but their togetherness"; but thus there are here *two* relations, since knowing is itself one—we have *i.e.* consciousness existing in the relation implied by "knowing consciousness," and also further, the relation of "togetherness" between consciousness, itself already thus related, and the proposition; and while knowing is a relation, perceiving is not.

The same criticism applies to the parallel statement (p. 20) "The mind is compresent with all the things it knows". Here (since, to repeat, knowing is itself a relation) there are obviously two alternatives;—"is compresent with" means either.

(a) The same as "knows" and then the assertion becomes tautologous; or

(b) Something different from "knows"; but in that case mind is of course compresent with all other reals without distinction whether known or not; the assertion, *i.e.* becomes too general in its application to be of any special value.

(4) Then, as to the nature of mind itself, Dr. Alexander's view is that minds are (like consciousness itself) also in relation to physical things, a relation such that in virtue of it "mind *knows* things" (p. 5). And the act of mind which apprehends the object is continuous with "the whole tissue of mental processes which, considered as a whole, *is* the mind".<sup>1</sup> But I think these two views really involve an implicit self-contradiction, inasmuch as by whatever name we may call the conscious subject—mind, ego, self—it appears to be unquestionable that it is characterised by something other than mere continuity—by what can only be described as an identity which transcends the change which may attend mere continuity in itself; and this essentially necessary identity must be wanting from any "tissue of *processes*" which, just in being elements in a temporal series, are all in themselves necessarily transient and fleeting. The subject which, *e.g.* knew a proposition ten years ago is to some extent and in some way (not merely continuous but) identical with the subject which knows another proposition at the present moment; but obviously, the mental processes of ten years ago have ceased to exist, even if we qualify this by admitting that they determine the character of present processes. Thus it seems to be quite impossible to say, with Dr. Alexander, both (a) that mind *is* merely this whole continuous tissue of mental processes, and also (b) that mind *knows*, in any real sense; for each assertion at once negates the other.

Then there is another way in which the self-identical character of the knowing subject cannot be an attribute of any tissue of mental processes merely as such; for not only is this essential identity im-

<sup>1</sup> Italics mine. I may say, to anticipate possible misunderstanding, that I do not question in the least the continuity of mental process as a psychological fact, nor that mind implies mental processes.

possible in the case of the transient processes of a *temporal* series, but it is also incompatible with those differences which exist between the *coexistent* processes which together constitute a mode or phase of consciousness or mind at any given moment. For any such mode being a complex of emotive, conative, and cognitive processes, we cannot say that this group of essentially different (though united) processes can, simply as a group, know, feel, or will; here again, *i.e.* we cannot say both (a) that such a group of processes, merely as such, *is* mind, and also (b) that mind feels, knows, or wills. So that whether taken as a temporal series, or as an instantaneous group, we seem compelled to say—

(a) If these processes themselves are the mind, then the mind cannot really know, either physical things or other objects.

(b) But if mind knows, then it is something other than the continuous tissue of these processes; and these results would hold, if for "know" we substitute "experience".

(5) Dr. Alexander adopts a view which appears to be rather in favour at the moment:—

(P. 9) "My mind is located in my body".

(P. 36) "My mind is in the same place as my brain."

(P. 11) "The complex of experiencings<sup>1</sup> is always localised in the skull."<sup>2</sup>

It appears to me that the consequences of this general position, if taken in any literal and not merely metaphorical sense, would appear to commit us ultimately to materialism (however refined that may be), in the sense that mind is thus at once necessarily reduced, like chemical or vital processes, to some type of atomic or ethereal vibration. For when we say that *e.g.* chemical action is located in a test tube, or digestion in the body, we mean ultimately, if we eschew mysticism, that certain physical entities move in a certain way: we cannot conceive of any other meaning here of the words "located in"; location means definite space occupancy, and this is the seal of material entities; so that to ascribe, in any literal sense, location also to mind is really to materialise mind, unless we are to revolutionise many of our fundamental terms.

And in addition to this general difficulty, there appear to be others; for each mental process seems to be dependent on, or associated with, a special brain area, and must therefore be, if located at all, located in that area only, and not in the brain or skull merely at large. But, complex as mental processes are, still mind is somehow a unity; and so the question arises: How is this local cerebral distribution transcended? In order to conserve this characteristic mental unity, we must apparently locate the essential unified mind

<sup>1</sup> As distinct of course from cerebral processes.

<sup>2</sup> Apparently, too, Dr. Alexander would identify ego and mind (p. 35); "The primary fact is that I, the mind, am compresent".

in some central brain region, like the soul of old in the pineal gland; and in that case what becomes of cerebral localisation? If, on the other hand, each mental process is located in its own special area only, what becomes of the essential unity of mind?

Distributive cerebration on the one hand, and the unity of mind on the other, seem to render the location of mind in the brain quite inconceivable; and other difficulties would lie in the facts (if accepted) of telepathy and personal immortality; while finally, the physical brain in itself cannot be compresent with certain entities with which however the mind, though located in the brain, must obviously be compresent, *e.g.* with past and future events, and with timeless universals.

(6) But if consciousness is not a relation, what is its nature? It is, says Dr. Alexander, "a distinctive property" (p. 2); "a peculiar quality distinctive of minds" (p. 28); the "distinctive character of minds" (p. 29); but the question must be asked, What kind of quality or property, and how differentiated from all other qualities, both of minds and non-minds? Dr. Alexander's general position would seem to make any definite answer to these questions difficult. For though consciousness is not a relation, knowing is; and therefore by parity of reasoning, perceiving, feeling, conceiving, thinking, are all likewise relations; and therefore they cannot, singly or collectively, be the same as consciousness; so that there would seem to be nothing distinctive, nothing plainly distinguishable and nameable, which consciousness can be. It is, certainly, "the distinctive character of minds"; but mind is (p. 5) the "whole tissue of mental processes" continuous with the "act of mind which apprehends the object"; and "process" and "act" necessarily imply some relation. So that when we consider any particular mental act such as thinking, knowing, or conceiving, it is very difficult to see what distinctive quality or property such an act can have other than what we intend to express when we call it "thinking," etc., taken together with the relation this admittedly implies; nor would it be sufficient, in order to divest consciousness of all relational character, to say that it is merely the class name for all mental processes taken together, since such a general term would still retain the relational character of its species. We should have to say that consciousness is some common and homogeneous quality distinguishable equally from every mental process in the tissue which is mind, and is, further, a quality such that, while every such process is or implies a relation, it itself is never a relation; but is any such quality or property actually conceivable?

J. E. TURNER.

## THE LIMITS OF LOGICAL VALIDITY.

" . . . if it (*i.e.* inversion) is valid, I see no reason why it is not equally valid to infer from 'Every truthful man is mortal' to 'Some untruthful men are not mortal' (*A New Logic*—Dr. Chas. Mercier).

Formal Logic would be little studied were we dependent on certain of its critics for explanation of its principles. The author of the quotation given above, for example, seems to think that his statement disposes of the problem of inversion quite satisfactorily, for in *MIND* for April, 1914, he assures us that in his *New Logic* we shall "find the converse, the obverse, the contrapositive and the syllogism discussed with similar results".

The unit of knowledge and of meaning is the judgment; the judgment is also therefore the topic of logic. Here at once arises a difficulty for those not technically versed in deductive rule and method. Since symbolic formulæ are habitually employed to denote the various species of judgment, it is commonly assumed that the logical possibilities of, for instance, the formula  $S$  is  $P$  may be discussed without reference to any particular context. And the assumption is justified if the discussion be carried on by those who can take for granted the fact that a context is implied. But should there intrude upon the argument "one who has long ago climbed out of the dark and narrow pit of Traditional Logic," he is practically certain to misinterpret the significance of the judgment and to suppose it to consist of two terms arbitrarily linked together by a copula. The manner in which terms can be or represent "things" such critics of logic do not pause to consider.

The interrelation of judgment and systematic meaning has been so often and so well explained that further elaboration should be unnecessary. Students of logic must, however, be clear upon two points. First, a judgment has no meaning in itself; it is only as implied by knowledge, as part of a science, that it possesses significance. And to be true, it must first be significant. For instance, the statement that hydrogen and oxygen combine to form water is meaningless except as part of the science of chemistry. Should one desire to know its meaning and its truth he must study chemistry; there is no other way. Consequently a judgment is not the announcement of a sudden discovery that two 'things' are linked together. It is an inseparable unity of meaning which depends for significance and truth upon a whole of meaning, beyond itself, of which it is a part. *It is the distinctive character of formal logic, and this is the second point, that it regards this*

*whole of meaning 'beyond' a judgment as systematic and accordingly treats it as a classification.* The terms in a judgment can be defined only with respect to the classification of which they are part; and the truth of the judgment is simply part of the truth of the system which guarantees it. The proposition *S* is *P* is therefore the subject of logic only if it be a possible logical proposition. That is to say, it need not necessarily be 'true'—for the classification implied cannot be expected to be completely adequate to the facts of the case—but must at least be capable of being interpreted as a unity, the terms of which bear an understood relation to one another. It is not any *S* which is any *P*, nor is it any class *S* which is any class *P*; it is an *S* and a *P* that are somehow connected in a classificatory scheme which remains implicit and is taken for granted. It is a general defect in the teaching of logic that the propositions selected for discussion by students are usually instances of classifications so little scientific and so popularly vague that the importance of the systematic meaning 'beyond' the proposition itself becomes negligible and is accordingly forgotten.

This description of the judgment must not be supposed to confer a species of superiority upon the denotational aspect of logical inference. We cannot tell whether a particular judgment be the subject of logic or no until we know its meaning; further, the classification on which the assertion is based is a logical division in terms of meaning, it is, in fact, a single significant scheme. That extension and intension vary inversely is one of the superficial truths imposed on logic by the didactic limitations referred to. The summum genus of a scientific classification is not the term with greatest extension and least significance. It possesses no meaning at all apart from the system of which it is part, and as part of that system it takes for granted the entire meaning of the classification to which it belongs. Significance does not attach to the individual terms except as "in" the system. This being so, it is abundantly clear that a proposition to be capable of receiving logical treatment must refer itself to one classificatory scheme, and one only. The inference quoted at the beginning of this article is obviously an instance of illicit process; a further objection to it is that the premiss from which the conclusion is drawn is not, and cannot be, properly the subject of logic, for the reason that it attempts to refer itself to two utterly disparate classifications at once. It reads 'every truthful man is mortal' and, technically speaking, is quite meaningless. We may discuss truth and not-truth or mortality and non-mortality; but we cannot reason about both at once. The classification Dr. Mercier ultimately adopts—for he is forced to choose—is that of mortality and the qualification 'truthful' becomes at once obviously irrelevant. Consequently his inference should be:—

Every (truthful) man is mortal.

Some (truthful) not-men are not mortal.



What objection there is to this conclusion cannot be made upon the score of its logic.

This brings us to a wider aspect of the matter, for ultimately the importance of the classifications which constitute knowledge lies in their external reference. Knowledge is 'true' of facts, and increasingly true as it advances. Does each succeeding discovery partially invalidate not merely former conclusions but also the logic which dictated them? The answer to this apparently simple question seems to be the source of much confused thinking.

The usual criticism levelled at logic is that it seeks to substitute a rational criterion of truth for matter of fact. In a sense this is quite true and calls for discussion later; meanwhile it should be observed that between deduction and induction no choice is possible. The proper function of deductive logic is to ensure the systematic ordering of the meaning we assign, to test it is the business of induction. A research scientist formulates an hypothesis of some sort in order that he may thereby be enabled to correlate better the 'facts' of the problem which engages his attention. To test such an hypothesis he has usually to deduce its consequences for verification by experiment. He begins with a rough classification and a minimum of meaning and mends both as he proceeds. That this is his method is no condemnation of logical process. Logic asserts that, given the original qualification, certain consequences follow. That the consequences do not follow does not imply that logical inference is fallacious, it implies that the classification is inadequate. A further hypothesis suggests itself, the logical consequences are again tested, and so on. At every stage of the inquiry it is the knowledge rather than the logic that is insufficient. Indeed induction leans heavily on deduction for support; one of the chief utilities of the latter is that it makes clear the remotest consequences of any tentative assumption, and so indicates the points at which ideal consequence and actuality disagree.

The main purpose of deductive logic, stated negatively, is to secure us against self-contradiction. The typical form assumed by the principle of non-contradiction is that of dichotomous classification. Dichotomy may be said to be a challenge to us to make our meaning explicit; in all such cases we distinguish between classes in terms of some meaning which, assigned to one, cannot therefore be assigned to another. 'Middle' or doubtful cases, should we discover such, are no infringement of the general principle but simply serve to shew that our classification has not proceeded far enough. To take a concrete instance, the assertion man is mortal, inductively interpreted, implies that man as object is to be described as possessing certain qualities—a finite life history—in common with other living creatures. Formal logic as its contribution to the discussion points out that a classification under the general notion of a finite life history is implied. This classification is somewhat as follows:—



The logical criticism of this is that there is no genus under which the species mortal and non-mortal may be subscribed; consequently though one term may be described neither can be defined. From the point of view of knowledge and meaning this criticism amounts to an assertion that no positive content can be assigned to non-mortality. Dr. Mercier's argument may therefore be taken further. If from the proposition 'man is mortal' we infer the inverse 'some not-men are not mortal' the conclusion is unsatisfactory, not because the logic is doubtful but because we are compelled to use the term non-mortal as though it implied a meaning 'beyond' itself, whereas in fact it does no such thing.

There is a further criticism of logic and of scientific method, profounder than Dr. Mercier's, which calls for brief notice. The late Prof. William James used to accuse logic of attempting to substitute a rational for a real criterion of truth; Prof. Bergson, going one better, accuses science of 'intellectualist' distortion of reality. It is true that the original Greek logicians believed logical notions to possess a higher reality (or rationality) than events as such. From one point of view they were at least methodologically correct; they identified the real with the rational. Modern science, though its method be inductive, makes an assumption precisely similar. Assuming that events possess, or are instances of, some rational order, science sets itself to discover what that order is. So far as the quest succeeds, our knowledge becomes rational and relatively independent of mere descriptions of events. Prof. Bergson points out, and rightly, that our very perception of material objects as such is of this order. What he fails to see is that we do not depict as psychologically static what is psychologically dynamic. He therefore accuses the intellect of inadequacy to its problems, instead of examining its nature more carefully. For whenever we 'objectify' a mental content, even in perception, the construction or structure we give it as object is always so far logical rather than psychological, and is the achievement of the understanding as contrasted with mere associative memory. To confound the logical structure with the psychological event is as profoundly wrong as to suppose the logical structure to be more real than the event. It is none the less true that the descriptive structure science assigns to events enables us to control them to the limit of our present understanding. For this latter reason, if for no other, any philosophy must take account of scientific descriptions—events as understood—in considering the ultimate nature of reality. Scientific truth and psychological events in experience are not to be regarded as in one and the same plane;

the former is more 'true,' the latter is more 'real,' less abstract. But for the former the latter would be meaningless. *Science, then, does not shew as static what is essentially dynamic; it shews a psychological sequence of events to imply a logical structure—within the limits of its defined area of application.* All knowledge aims at substituting a logical for a psychological criterion in this way; to do so is the special differentia of knowledge. It is, of course, true that the poorer and less systematic the meaning we assign to any series of events, the more nearly is our judgment a mere description of their sequence and the more psychological is our criterion of truth. In this sense there is a closest relation between judgment and fact in that knowledge which is least systematic and possesses least significance. Perhaps this is why Dr. Mercier, founding his notions of reasoning on the practice of medicine, is so little able to understand the significance and utility of logic.

ELTON MAYO.

## THE OPPONENTS OF FORMAL LOGIC.

THE remarks of Dr. Schiller and of Dr. Mercier in the last issue<sup>1</sup> call for a brief reply. They go far to justify the statement I have made elsewhere that, on the constructive side (which is the only side that really matters) the two opponents of formal logic cancel each other. Dr. Schiller accuses me of failing to appreciate Dr. Mercier's banter. I should appreciate it thoroughly, if it were merely banter, but the assumption which underlies the whole discussion is that the logicians, old and new, are playing a game while he (Dr. Mercier) is the one whose logic is the study of real reasoning. He does not claim to have formulated a better game but to have substituted a real logic for a sham one. That is the matter which calls for investigation and it is interesting to note that Dr. Schiller in no way endorses it. It is interesting to find, in the same issue, Dr. Schiller (provisionally) endorsing a claim which Dr. Mercier does not make, and Dr. Mercier, making an entirely different one. If Dr. Schiller intends to support Dr. Mercier I would suggest that he examine the question whether or no Dr. Mercier's logic is what it pretends to be—the practical logic applicable to every-day life to which the inquirer wishing to know "who stole the bacon" can go for guidance. If this claim be justified, Dr. Schiller's projected psychologic becomes superfluous. In agreeing that Dr. Mercier's logic is formal and also a game Dr. Schiller implies that the claim is unjustifiable. What is more important than the discussion concerning the precise value of formal logic is that a claim like that of Dr. Mercier should receive careful and critical examination.

To turn to Dr. Mercier, I am glad to note that the attack on Dr. Bosanquet is falling into the background. Dr. Mercier attempts to support himself by quoting from my article in the *Quarterly Review*. But, notwithstanding the fact that Dr. Bosanquet and I differ fundamentally on many important matters, nothing that I have written will bear the interpretation Dr. Mercier attempts to put on it. Dr. Mercier should remember that one of the duties of a writer in *The Quarterly* is to explain to those knowing little or nothing of the subject the broad outlines of modern developments. Such will need to be informed that there is a fundamental difference between much of the matter

<sup>1</sup> No. 92, p. 564 *seq.*

found in Dr. Bosanquet's book and formal logic of the Barbara, Celarent, type. All those pretending to know anything of logic will already be aware of the difference, and of the fact that the treatment of both branches under the title logic is not a peculiarity of Dr. Bosanquet, but is found in the work of nearly all modern logicians. To call Dr. Bosanquet's work spoof because he follows the general custom would be absurd.

With regard to the remainder of Dr. Mercier's remarks, I venture to suggest that he would obtain a firmer hold of his subject if he would try to appreciate the point of view of those with whom he has to deal. His reply to me, so far as I can discover, contains only two points which have any real bearing on what I have written either in this journal or elsewhere. One is the pointing out of a grammatical error and the other is the request that I express the argument *a fortiori* syllogistically. With regard to the first I must plead guilty. Minor slips and misprints have a way of creeping into my articles. But even Dr. Mercier is not infallible, unless the verb "cultfates" is one recently coined by himself. The second I can hardly take seriously. Surely Dr. Mercier is aware that the *a fortiori*, like every other argument, can be expressed syllogistically. In order not to distract attention from more important matters I am answering his question in an appendix.

The remainder of his discussion—his request that I write my arguments in syllogisms, his talk about my capitulating at Ulm.... is entirely wide of the mark. I am a logician, in the same sense that Dr. Mercier is a logician, namely that I have made a special study of the subject, and believe myself to have done original work of some value. I am also, I hope, a logician in the sense that, when I write about logic and logicians, I do so with a knowledge of the subject-matter and an understanding of the views of the logicians whom I criticise—even those of Dr. Mercier. I am not a professional teacher of logic and it would affect me just as little as it would him if logic were as valueless as Dr. Mercier (or Dr. Schiller) thinks. But the value that I place on logic is, I believe, fairly clearly stated in one of the articles from which he quotes. And to inform Dr. Mercier just how and why the question of formal logic affects me, its bearing on my work, would occupy too much space. He must take my word for it that I have nowhere and at no time put forward views on logic which imply an obligation to express the reasonings of every-day life and of controversy in syllogistic form. Whether any logician has done so is a matter on which I express no opinion, certainly I have not.

As Dr. Mercier questions my cogency of argument, I will try to repeat one or two of the statements more concisely, and, I hope, more cogently. My reply to Dr. Mercier's contention that inversion is invalid was that the particular argument he used had been answered in advance. My reply to Dr. Mercier's contention that

Dr. Bosanquet is playing a game of spoof is that the arguments used would prove everything spoof. Without troubling to bring the arguments under the recognised figures and moods, I do not think any one but Dr. Mercier would deny their cogency. Whether it is a personal peculiarity, or whether it is due to the "New Logic" I do not know, but Dr. Mercier seems to have developed an incapacity for understanding argument of any kind whatever.

Dr. Mercier repeats his claim that his "New Logic" is not a game in the same sense as the old one. In Dr. Schiller's sense of the word it is. Although I disagree with them, I am pleased to find that Dr. Mercier's views are obtaining an airing. It is not my duty here to review Dr. Mercier's work, but I should like him to try to appreciate the gist of the criticism I put forward in the *Quarterly Review*, namely that the same argument can be expressed in different logical forms, and that a change of the logical form does not make the reasoning any the less conceptual. He might then obtain some glimmering of the manner in which his attempt to confuse the sphere of logic with the sphere of life appears to those who regard logic as a conceptual science, and the reason why the term quackery is used to describe it. He will also begin to realise how the hotch-potch into which he throws the fundamentally different processes of deduction and induction depreciates the value of such ideas as his book does contain. I should like to add that my reference to the method of advertisement has nothing to do with Mr. Heinemann but is intended to apply to remarks in Dr. Mercier's Preface and elsewhere similar to those he has made in the discussion to which I am now replying.

H. S. SHELTON.

#### APPENDIX.

##### *The argument a fortiori.*

The argument *a fortiori*, A is greater than B, B is greater than C,  $\therefore$  A is greater than C is obviously not a syllogism. As it contains four terms no single syllogism can be constructed containing those terms as such. To express it in two or more syllogisms can be done in several ways. The following may not be the clearest but it is one way:—

##### SYLLOGISM I.

*Major Premise.* All (greater than B's) are (greater than things that B is greater than).

A is (greater than B).

$\therefore$  A is (greater than things that B is greater than).

Restating the conclusion and making it the major premise of

## SYLLOGISM II.

we obtain:—

All (things that B is greater than) are (things that A is greater than).

C is (a thing that B is greater than).

C is (a thing that A is greater than),

or A is greater than C.

The syllogisms are Barbara, Figure I. The assumptions are the ordinary premises *a fortiori* and a form of the universal implied but not expressed in the argument. In putting an argument into logic, needless to say we place the copula where most convenient.

In the preceding statement I have assumed that, in stating the terms of a syllogism, the original statement may be paraphrased so as to give a convenient form. I think few logicians would object. I am fully aware that neither the transposition from the conclusion of syllogism I. to the premise of syllogism II., nor the statement of the final conclusion is an Aristotelian immediate inference. If, however, Dr. Mercier objects that his question is not answered the following is formally unexceptionable:—

*Major Premise.* All cases where, of three things, the first is greater than the second and the second greater than the third, are cases when the first is greater than the third.

*Minor Premise.* A, B, C, is a case where, of three things, the first is greater than the second and the second greater than the third.

*Conclusion.* A, B, C is a case when the first is greater than the third.<sup>1</sup>

Dr. Mercier will object that this is complicated and is not the form that the mind naturally adopts in this kind of reasoning. I agree. The placing of such an argument in syllogistic form is pedantry, and moreover a form of pedantry to which I am in no way addicted. With Bradley I agree that the complicated major premise is not the real universal through which we reason, and I am perfectly willing to admit the existence of other logical forms than the syllogism. But what Dr. Mercier does not appear to realise is that the inference *a fortiori*, simple as it appears, assumes a universal which is not expressed and which the form in which I have put it expresses inadequately. To show the necessity of the universal I will state an argument which is *formally* similar to *a fortiori* but invalid. From A is next to B and B is next to C

<sup>1</sup> This very simple method has been pointed out to me by Mr. Alfred Sidgwick, who, needless to say, does not place much value on the game of formal logic. Like Dr. Schiller, however, his depreciation of formal logic is consistent and is not accompanied by an attempt to found another logic equally formal. If Dr. Mercier is interested to find a study of that part of reasoning (in my opinion the most important part) which is not, in the strict sense of the word, deduction, he cannot do better than refer to Mr. Sidgwick's *Application of Logic*.



it does not follow that A is next to C. The validity of the argument of the form of the *a fortiori* depends entirely on the relation asserted. This is the danger of multiplying logical forms, and the reason that the syllogism has so long kept its place against amateur attempts to found alternative modes. "New Logics" are so apt to miss the universals which are implied but not expressed in ordinary reasoning, and to confuse actually valid inferences with formally valid inferences. The *a fortiori*, though valid, is not *formally* valid. A logic, like that of Dr. Mercier, which attempts to displace the syllogism, is so liable to contain forms of reasoning which are accurate only by accident, that is the accuracy of which depends on the particulars of the argument rather than on its general form. While professing to carry out the "explication of what is implied in propositions," it does not really do so.

H. S. S.

### THE CLASSIFICATION OF TERMS.

Miss KLEIN's discussion of terms is a very interesting exposure of some of the absurdities of the old Logic. That Logic can do nothing with a proposition unless the principal verb in it is 'is' or 'are'; and consequently the simplest and clearest propositions, of whose meaning no child could doubt for an instant, are tormented and transmogrified into grotesque absurdity, for no apparent purpose except to make them absurd. What conceivable advantage can there be in substituting for the admirably terse and transparently clear proposition, 'The Owl and the Oyster were sharing a pie,' such a monstrous abortion as 'The creatures known respectively as the Owl and the Oyster are individuals sharing a pie' ? The abortion has, it is true, got the copula into its composition, but the transformation is not only unnecessary for any other conceivable purpose, but is also doubly and trebly unwarrantable. No immediate inference—and this is an immediate inference—is warrantable if the transformate contains anything that is not in the transformand. No additional fact or knowledge is warrantable or permissible. But this transformate assumes, without a shadow of justification, that the owl and the oyster still exist. It says they *are* individuals. Are they ? The transformand does not say so. It says they *were* sharing a pie, and for aught it asserts they may now both be dead. The skin of the owl may be stuffed and its body thrown to the cats, and the oyster may have been eaten with pepper and with vinegar (much better than lemon juice). The transformate assumes also, what the original does not assert or hint, that the owl and the oyster were the products of special acts of creation. There is in the transformand nothing in refutation of the Darwinian theory, nothing to lead us to suppose that the owl and the oyster were not developed, in the usual way of owls and oysters, from eggs. In early Victorian days it used to be considered humorous to put a simple statement into many long words, and our grandfathers would chuckle with delight at the verbal artist who should translate 'B was a Butcher who had a big dog' into 'The second letter of the alphabet was a purveyor of meat who possessed a large specimen of the canine race'; and it is now left for Logic to assume the cast-off garments of the out-of-date humorist, who was never very humorous. As humour it was poor stuff; but what are we to say of it as Logic ? The transformation is a good example of the function of Logic as a device for the conversion of new-laid eggs into rotten ones.

The object of substituting this monstrous, cumbrous, unwieldy, and stupid paraphrase for the original is to get the copula into the proposition; and the fancied necessity of getting the copula into the proposition rests upon the false assumption of Logic as to the structure of the proposition. In order to save time and space let us bring the sharing into the present tense, and say 'The Owl and the Oyster are sharing a pie'. This is now, I suppose, but for the plurality of the Subject, a logical proposition, and its logical construction is *The Owl and the Oyster—are—sharing a pie*, by which we are to mean either that the owl and the oyster belong to the class of things that share a pie, or that the owl and the oyster are invested with the quality of sharing-a-pie-ness. We are supposed to contemplate the owl and the oyster on the one hand, and sharing-a-pie on the other, and to predicate the one of the other. I assert with the utmost confidence that we (I mean non-logicians, it would be very unsafe to assert what logicians do or don't do) do nothing of the kind. What the proposition brings to our minds is the owl and the oyster on the one hand, and a pie on the other, and what we contemplate is the *action* of the pair of animals on the pie. The true construction of the proposition is *The Owl and the Oyster—are sharing—a pie*.

When thus understood, all the difficulty of the plural subject, if there is any difficulty, vanishes. Even a logician, I suppose, would have no difficulty in apprehending the proposition 'All the owls are sharing a pie,' or 'Some owls are sharing a pie,' but when they are confronted with the proposition 'Two owls are sharing a pie' they are paralysed. Two is a quantity unknown to Logic, and no logician can admit that two owls, or two logicians—the difference is neglectable—can do anything. Not being a logician I find it as easy—easier, in fact—to picture to myself two owls sharing a pie than all owls engaged in the same operation. I have now only to take away an owl and substitute an oyster, and the mental operation is complete.

The propositions that baffle all the profundity of Mr. Bradley's mighty intellect are, to the new logician, childishly easy. When we have before us the proposition A and B coexist, we do not need to torture it in order to get, by hook or by crook, the copula into its construction. We do not contemplate A and B as subject and coexistence as predicate, and find ourselves nonplussed by the absence of a copula. What we see in the proposition are A and B, which we contemplate in their relation to one another of coexistence, and we then predicate this relation as existing between them; and for our purposes, that is to say for the purpose of clear statement of what we mean, for the purpose of intelligibility, for the purpose of reasoning, for the purpose of argument, it matters not whether we say A and B coexist, or A—is coexistent with—B, or B—coexists with—A, so long as the proposition we use is that most appropriate to the purpose of the argument. When we say

A and B lie east and west, the positions of A and B are compared with these two points of the compass, and the proposition predicates identity or parallelism of direction. That is the relation between them. Whether the relation is predicated as *A and B lie east and west*, or *A lies east of B*, or *B lies west of A*, must depend on the purpose of the argument. Abstractedly, it does not matter which we use, for all mean the same thing, and each is an implication of the others ; and each one of them is as perfectly and completely logical as the rest, although none of them contains the precious but quite dispensable copula.

Miss Klein's difficulty in other cases arises from the erroneous definition, that is given in logic, of a general term. Properly conceived, a general term is the name of a class ; and a class does not, any more than a corporation, necessarily include an indefinite number of individuals. No one but a logician would contend for a moment that the individuals included in a class must necessarily be indefinite in number. Any one but a logician would think at once of the days of the week, the months of the year, the crowned heads of Europe, the Dreadnoughts in the British navy, the lighthouses on the south coast, the past contributors to MIND, and would see at once that the individuals in a class may be perfectly definite in number. A class is characterised by the possession, by all the individuals in it, of a quality common to them all, and proper to them all ; that is to say, a quality possessed by every one, and not possessed by any individual in neighbouring classes. It matters not how many or how few the individuals of a class may be ; if they have this quality they are gathered into a class by possessing it. A single individual may be a class if it has a distinctive quality. If all the field-m Marshals except one in the English army were killed, the one left would constitute the class of field-m Marshals for the time being. According to this definition, the only proper definition, of a class, the nine Muses are a class, the paws of Miss Klein's cat constitute a class, her parents, the wheels of her bicycle, and the days of this week, each and all constitute classes ; and the names she gives to the classes are general terms.

Miss Klein discerns that the indefinite article is ambiguous, and that a monkey may mean a certain monkey, or may mean the class of monkeys, *i.e.* any monkey taken at random ; but she does not explicitly acknowledge, although she gives an instance of the rule, that the definite article also may have the same ambiguity. 'The gorilla' may mean the individual gorilla that I have in mind, or it may mean gorillas generally, as in *The gorilla is descended from the amphioxus*.

In Miss Klein's classification, the first division of terms is into general terms, which may be either abstract or concrete, and individual terms. This classification seems to me incorrect, and is certainly not exhaustive.

'General term' is, I think, the correct designation of the name

of a class, but 'individual term' is not, I think, the correct designation of the name of an individual thing. An individual term means one name, it may be of one thing, it may be of many things. The proper designation of a name that is applicable to one thing only is not individual term, but singular term.

Moreover, a division into abstract and concrete is not an exhaustive dichotomy, nor is it an antithetic couple, for there are many terms that are neither abstract nor concrete, and many that are both abstract and concrete. I know that in thus saying I am disregarding authority, but it is quite clear on careful examination that authorities have never distinguished between concrete and substantial, and have confused abstract with attributive. A concrete thing is, I submit, a thing which possesses qualities, or to which qualities may be attached or attributed; and the true antithesis to a concrete thing is an attribute, or attributed quality, while the true antithesis of concrete is not abstract but attributive. For we may contemplate a quality under two aspects. We may contemplate it as inherent in the concrete that possesses it, as when we contemplate a *white* horse or a *hard* steel, or as when we predicate of a horse that it is white, or of steel that it is hard. But we may, if we choose, abstract the quality from the concrete, and contemplate it in isolation from this concrete or from any concrete, as when we contemplate the whiteness of the horse or the hardness of the steel, or simply whiteness or hardness. The distinction is important in logic for several reasons. In the first place, it is clear that an abstract quality may itself possess minor qualities, and may be therefore concrete. We may speak of pure whiteness and of glass hardness, pure being an attribute of the whiteness and glass (glass-hard) an attribute of the hardness. It is true that we can contemplate pure-white snow and glass-hard steel, and thus it seems as if we can attribute minor qualities to attributes as well as to abstracts, but this is not so. We can attribute whiteness to snow, but before we can attribute pure-whiteness we must first abstract the whiteness, invest it with the quality of purity, and then attribute to snow the compound attribute of pure-white.

The attributive term is important in any Logic, but in the old Logic it is of supreme importance, because according to this logic every predicate is an attributive term, and the only form of proposition that ought to be admitted into Logic is that which predicates an attribute of a subject. This doctrine is stated flatly and positively in every book on Logic, and though there is no book on logic that does not in practice systematically disregard and ignore the doctrine, still the doctrine is there. In rational Logic the attributive term is important in this respect, that it is the only term that is restricted to the object place, and cannot form the subject of any proposition except a defining proposition. We cannot put 'hard' or 'white' as a subject and predicate of them

anything except their dictionary meaning. In this the attributive term is sharply differentiated from the abstract term, for abstract qualities can properly stand as subjects in propositions. We may properly say Hardness is a quality of steel or Whiteness is characteristic of snow. Hence one exhaustively dichotomous division of terms is into Substantial and Attributive.

This is not the only possible primary classification of terms. Of scarcely any classifiable group of things can it be said that there is but one valid classification and no more, though of most such groups we can safely say that there is one classification that is best adapted to a specific purpose. Classification is a way of contemplating things, and is effected by taking as a basis or fundamentum some quality, and setting apart in the mind those objects that have this quality from those that have it not. We may therefore, and we do, in contemplating a thing or a group of things, regard it primarily as a *thing* or *things* possessing a certain quality or qualities, and when we so contemplate we contemplate the thing or things quantitatively, as an individual thing or a class of things. But this is not our only mode of contemplation. We may, and we do, fix our attention not on the thing or things so much as on the *quality* or *qualities* that interest us at the time. In the former case, the names of the thing or things are Quantitative terms, and are either Singular or General according as we contemplate an individual or a class. In the latter, the names of the quality or qualities we contemplate are Qualitative terms, and are either Abstract or Attributive according as we do or do not contemplate them apart from the concretes that possess them.

We may therefore make two classifications of terms, equally comprehensive and exhaustive, both having their uses in Logic, but having different uses, and we may express them in one table as follows :—

Terms.	{	Quantitative	{ Singular General }	Substantial	}	Terms.
		Qualitative	{ Abstract Attributive }			

Concretes drop out of this classification, because concrete is not quite the same as substantial. An individual and a class are both necessarily concrete, for they must have qualities in order to be known as individual or class ; but an abstract is itself a quality, and though some abstracts have subordinate qualities and so become concrete, others have not ; at least, as at present advised, I think not.

Anything that tends to break down the hide-bound absurdity of the old Logic is welcome, and therefore I welcome Miss Klein's classification of terms ; but I do not see how it is possible to admit into Logic the quantities 'this' and 'that,' 'these' and 'those'

and yet continue to exclude 'most' and 'few,' 'the first' and 'the last,' 'others' and 'the rest,' and the great multitude of other quantitative signs with which our statements, arguments, and reasonings abound.

CHAS. A. MERCIER.



## VI.—CRITICAL NOTICES.

*Main Currents of Modern Thought. A Study of the Spiritual and Intellectual Movements of the Present Day.* By RUDOLF EUCKEN. Translated by MEYRICK BOOTH, B.Sc., Ph.D. (Jena). London: T. Fisher Unwin, 1912. Pp. 488. Price 12s. 6d. net.

ANY one who has ever tried to translate Eucken into English will appreciate the difficulties which Mr. Booth has had to overcome. Speaking from some slight personal experience of these difficulties, I should say that, on the whole, Mr. Booth has been exceedingly successful in overcoming them. Rightly, I think, he has not attempted to secure literal exactness, but rather to render the sense in simple and intelligible English. Considering that Eucken's style is full of words for which there are no adequate English equivalents, the translation is very clear and readable, and gives a thoroughly trustworthy and faithful reproduction of the sense. It is only by permitting himself a good deal of freedom in the choice of words and the handling of sentences that a translator can reproduce in English the peculiar effect of Eucken's thought. Now and again, sheer lack of English equivalents has forced Mr. Booth to add the German phrase in brackets. This has happened especially with that troublesome new coinage of Eucken's 'das Beisichselbstsein,' with the adjective 'beisichselbstbefindlich'. I note the renderings 'self-contained' (p. 60), 'self-sufficient' (p. 79), 'absolutely independent' (p. 113), which are perhaps as near as one can get. The idea conveyed is that of a *stability* unshaken by varying circumstances. We catch something of the same effect in the phrase 'to possess one's own soul'. The German 'kraftgenie' is literally rendered 'force-genius' on page 368, but I doubt that this term conveys much in English. A curiously difficult term to render is 'Arbeit,' owing to the peculiar connotation which Eucken attaches to it. Most commonly he contrasts it with the inwardness and creativeness of 'spiritual life' (*cf. e.g.* p. 311). It then stands for an existence absorbed in mere doing, in 'soulless' production, whether it be in industrial labour or in scientific research or in the busy-ness of commerce; it means a dissipation of life into superficial, or as Eucken likes to say 'peripheral,' interests. It means the shallowness that comes from exclusive pre-occupation

with external things, with the control of material nature, be it in the laboratory or the workshop. The English 'work' which Mr. Booth uniformly uses hardly carries all these shades of meaning. Yet what other term is there? I have noticed very few actual errors of translation. On page 121, *note*, 'von vornen her' and 'von vornherein' mean not 'from aforetime,' but 'from the start' or 'at the outset'. If Mr. Booth had looked up the reference to Lessing's *Ernst und Falk*, he would have found that the term is applied to premisses uncritically assumed *at the start* of an argument. On page 216, near the end, 'include' reads like a slip for 'exclude'. And on page 64, *note*, 'zur Entwicklungsgeschichte Spinoza's' surely means 'a contribution to the history of Spinoza's development,' but not 'Spinoza's History of Evolution'.

*Main Currents* is a translation of the fourth edition of Eucken's *Geistige Strömungen der Gegenwart*. Among all Eucken's numerous works this is, I should say, the one which gives the best general survey of his philosophy. For, first, it covers a more comprehensive ground than any of the other books. There are chapters, *e.g.*, on Subjective-Objective, Intellectualism and Voluntarism, Idealism and Realism, Monism and Dualism, Metaphysics, Teleology, Civilisation, History, Society and the Individual, Morality, Free Will, the Value of Life, Religion, and several more. Secondly, many chapters begin with notes on the history of the philosophical terms under discussion—a field of study to which, in his younger days, Eucken has made valuable contributions. And, lastly, the substance of Eucken's philosophy is all here, making up for what it loses in systematic form by the emphasis gained from insistent iteration, as each chapter culminates in the demand for the recognition of a cosmic spiritual life which is both a *fact* and a *task* to man, both the real basis of our lives, and an ideal to be achieved.

The book thus affords a good opportunity for trying to estimate the value of Eucken's teaching and accounting to oneself for the causes of his influence. This influence is remarkable alike for its extent and for its limitation. On the one side we have such facts as his success as an academic teacher in drawing large classes of students, the numerous editions of his books, their translation into most European and some Oriental languages, their author's lecture-visits to the United States and to Japan, the honour of the Nobel-prize for Literature in 1908. On the other hand, we have the verdict of the great majority of philosophers, not only in Germany, but wherever Eucken's works are studied, that—as Prof. Bosanquet recently put it in the *Quarterly Review*—he has made 'no precise and serious contribution to philosophical science'. Eucken would no doubt reply (and it is a fair plea) that this shows to what extent philosophy has lost touch with life and with the spiritual needs of the vast mass of civilised humanity. The philosophers, in return, may either blame humanity for being deaf to sound philosophy, or justify the situation on the ground that philosophy is necessarily

specialised expert's work, that it appeals only to special temperaments and demands exceptional qualities, and that it has no message for the market-place. It is perhaps worth while to see what light an examination of Eucken's teaching throws on the paradox of the relation of contemporary philosophy to contemporary life.

Broadly speaking, Eucken's call to humanity to re-possess itself of the cosmic Spiritual Life in which it is rooted, is a reaction against the Naturalistic and Materialistic tendencies in modern life. These tendencies may not count for much among professed students of philosophy. In academic lecture-rooms they may be regarded as 'ein überwundener Standpunkt'. But, for all that, they are very powerful in a great deal of popular thought and literature, and, above all, their character undeniably is impressed on much of modern civilisation with its comfort, luxury, speed on the one side, its struggle for the bare necessities of existence on the other. Material objects may occupy one's mind too much, alike when one has too little of them, and when one has too much. The phenomenon, therefore, from which Eucken starts is the deep unrest and dissatisfaction which run through the modern mind, at least where it does not live simply on the surface, but reflects on the meaning and value of life in present-day conditions. This unrest comes, in part, from the mere complexity of life—we are distracted alike by the multiplicity of interests which appeal to us on one side or other of our nature, and by the multiplicity of needs within us which clamour for satisfaction. In part, again, it is the effect of theory, so far as we accept the scientific view of the universe as a huge mechanism for which human life, alike in its achievements and in its aspirations, has little meaning, and for which man is but a tiny insignificant fragment of an immense objective order. In Eucken this unrest finds utterance. He voices the longing of many for peace, assurance, stability. He formulates the demand for a conception of the universe in which the things of highest value shall count for most. He points to the Spiritual Life as the panacea for the spirit's ills. In him the pendulum swings back from the belittling, oppressive immensity of the material system to the inner life of thought and feeling as the real centre and focus of the world. We must recognise the alternating pulses of life : to be open, to go out of oneself, to surrender oneself to the endless variety of experience that the world has to offer ; and again to return upon oneself, to reflect, to unify, to synthesise, to draw from the spiritual life within the strength to master all experience, lest one be mastered and 'enslaved' by it. This is the ascending life-movement. It is not bound by mechanism, but uses it as an instrument. It does not merely take in a 'given' reality, it 'transforms' it by 'creative synthesis'. Its 'truth' is not a copy of reality, but an advance to a new and higher stage of reality. It does not disperse and lose itself into a multitude of interests and impressions, but gathers them all together, and with a unifying lift,

as it were, initiates a 'new man and a new culture' (p. 19). Two things are here of special importance. (1) So far from accepting anything actual as final, the upward movement demands a *break* with the old, a negation. A qualitative heightening, renewing, enriching of life is necessary—almost a conversion, a revival, a re-birth. And (2) this must issue not merely in a new *theory*, but in a new *life*. The character of the spiritual life must be realised and expressed in personal action (hence Eucken's 'Activism'), it must not be merely an object about which we speculate from a distance. The reality of the cosmic Spiritual Life, which includes and transcends both self and world, must be intuitively grasped ('noological' method) and expressed in sincere, intense, strenuous doing. 'Selbstleben' and 'Weltleben,' merged in 'Geistesleben,'—within this framework Eucken's thought moves. Unmistakably the character of this thought is religious. Eucken's 'Spiritual Life' is indistinguishable from religion with the dogma left out. The well-known paradox of religious experience, *viz.*, the combination of the profound conviction that God's will is realised in all things, with the no less profound determination to realise that will in the fight against sin and evil, recurs in Eucken's paradox of the spiritual life as 'at the same time a fact and a task, a repose that can never be disturbed and an endeavour that cannot be satisfied' (p. 61).

Brief as this sketch is, it may yet enable us to solve our puzzle. What then are the causes of Eucken's influence? First, he is the centre of all who suffer in themselves the spiritual insecurity and hollowness of the age, who long for a reconstruction, and who hope that he who has diagnosed the disease, can also supply the remedy. Again, his forward-looking attitude ('the study of our own age is seen to lead beyond its own content into the future,' p. 479), his demand for a new heaven and a new earth to be brought about by human effort ('this idea of a spiritual civilisation is no mere matter of a new name, but of a new thing and a new task,' p. 306), strike responsive chords in widely different temperaments. He appeals to those whom Dr. Schiller once wooed in the name of Pragmatism as 'the young, the strong, and the virile,' with his promise of progress, of a world made better by human endeavour. He appeals to all, young and old, for whom the moral struggle is the dominant fact, and who construe life as a slow but sure victory of good over evil. His assurance of a better future within reach brings fresh hope to those who despair of the present. He has a message even for the disinherited of modern civilisation: 'to-day it is almost more a question of needing new men than new ideas, fresh and unspoiled individuals, upward-striving, mentally and spiritually thirsty sections of society' (p. 381). And, lastly, the religious temper of Eucken's thought enlists the sympathies of all who seek to base life on religion, and who emphasise in religion rather the element of personal experience than theological refinements of dogma. This

perhaps explains why those who have welcomed Eucken's philosophy most eagerly in England are to be found chiefly among Nonconformists. It explains also why the great vagueness of Eucken's concept of the Spiritual Life troubles those least who, seizing on its strongly religious character, translate it for their own use into the terms of Christian faith, and thus give it a far more definite content than is anywhere to be found in Eucken.

Now it is just this undeniable indefiniteness of Eucken's fundamental concepts that provokes the adverse verdict of philosophers. They complain, not without just cause, that pursuing the elusive concept of the Spiritual Life through pages and pages of talk about it, they grasp nothing in the end but a few generalities which are too vague for precise characterisation, and which, moreover, are well-known philosophical commonplaces. Nor do Eucken's numerous disciples and expositors throw additional light on the matter. At the crucial moment they all fall back on their master's favourite terms, like 'self-formation,' 'self-renovation,' 'self-heightening of life' without telling us in definite, positive terms in *what* this heightening, etc., is to consist. Eucken complains of the vagueness of the concepts used by Intellectualists (p. 84). Blank cheques, he says, which any one can fill in at pleasure! But is his own concept of the Spiritual Life any less of a blank? Mr. Booth in his 'Introductory Note' tries to explain the 'exact meaning' of the term (p. 10). But all he produces is a string of negatives. Bewitched by the spell of Eucken, he does not see that to tell us what the Spiritual Life is not, leaves us still wholly in the dark as to what it is in its own character.

Two apparently positive points might perhaps be adduced to weaken the force of this criticism.

(1) There is, first, Eucken's 'Activism': the subordination of theory to action, of knowing to doing, being, living. In detail this seems to mean two things. It is partly a protest against a false divorce of theory from life (*cf.* the demand, p. 229, 'to pass beyond the satisfaction of the intellect into whole-hearted alliance with the progressive forces of the universe'). It is also a reminder that even the best of theories falls short of the full reality of which it tries to grasp the essence. So far we may easily agree. A theory which loses contact with life, loses both its basis and its test. And Eucken is not the first to tell us that to know is not the same thing as to be, and that knowledge, even were it perfect, is not enough to satisfy the whole of human nature. But so far we have learnt little that throws light on the *kind* and *character* of the doing and living which theory is to subserve. And when we are told further that we are to deal, not with ideas or concepts, but with 'movements,' 'tendencies,' 'life-processes' which transcend the intellect; that philosophical systems are not so much refuted as outgrown (*e.g.* pp. 44 and 92) by the movement of life itself; that in the clash of contradictory theories conviction does not

depend on logical factors but on 'the content and force of the spiritual life, the spiritual concentrations, the life-energies' (p. 89); that the removal of contradictions becomes pressing only when our 'spiritual self-preservation' is at stake (p. 90), then we feel that an important truth is in danger of being overstated. 'Why did Luther and not Erasmus become the great leader of the Reformation (p. 92)?' Eucken's answer is: Because the reform of the Church became for Luther a question of spiritual self-preservation, fought for with an elemental passion, whereas the great scholar knew but did not feel or act. But is not another question more important? Why did Luther succeed where countless other agitators, equally passionate, would have failed? Does every sincere and fiery fanatic lead a Reformation? It was, surely, because Luther gave expression to a truer conception of sin and salvation. In short, there are passages in which Eucken appears to underestimate the importance of true theory for life. Against such a view, we must urge, first, that the striving after *true* theory, especially on the fundamentals of fine living, is not only itself a form of living, but even one of the finest; and, secondly, that the difference between a life which is spiritual and a life which is not, is—apart from weakness of will—mainly a difference of theory, *i.e.* of the working ideas and standards of value which our lives realise and embody. If this were not so, how could Eucken hope to make us live the Spiritual Life by publishing a theory of it? The mere spectator-attitude, that is agreed, has its obvious limitations, but the best theory is both rooted in life and returns into life to enrich and illuminate it. If true theory enables us to understand and appreciate the real nature of life, then it is not only an indispensable element in all 'life-movements,' but it is also itself a life-movement worth pursuing for its own sake. In effect Eucken admits this when he says (p. 72) that, before the facts of the inward life are fit to be used as a secure foundation, they must 'be classified and illuminate<sup>d</sup> by the methods of Philosophy'.

(2) The second apparently positive point is the *religious* character of the Spiritual Life. But here, again, the question endlessly arises: What religion? And in vain we wait for an answer. True, Eucken is sympathetic towards Christianity, and from his little book, *Can We Still Remain Christians*, we gather that the religion of his New Jerusalem will be a kind of Christianity brought up-to-date. But *how* modified, once more we are not told, beyond a repetition of the familiar generalities about the Spiritual Life. We are instructed to separate the 'essential' in Christianity from the 'accidental,' but on what principle, or by what criterion, we are to do this, and whether the result will still be anything that anybody will care to call Christianity, all this we ask in vain. Philosophy, one gathers, is to help in preparing us for the new outburst of Spiritual Life which the future is to bring.

Indeed, Eucken is not unlike a second John the Baptist calling his generation to repentance. Only we scan the heavens in vain for any sign of a second Christ who shall remodel Christianity.

The reasons for the vagueness of Eucken's concept of Spiritual Life are, after all, not far to seek. The main reason is that a Spiritual Life which is to originate in a break with the present and the past, which is to be so new as to be different from all that we know, is clearly not predictable. No one can, in advance, describe its character or its details. And it follows from this, in the second place, that in the end all attempts to read the character of Spirit in the great 'life-movements' of the past are idle. For the theory of the necessary break denies, in effect, continuity of evolution, and with it all possibility of legitimate argument from past to future. The revelations of Spirit in past movements—if indeed we can be sure that these movements were spiritual—throw no light on its nature for the future. This view is especially worked out in the chapter on 'Thought and Experience (Metaphysics),' where we read: 'If . . . it becomes clear that historical life does not advance with a continuous and steady movement, but that the whole must continually be made the subject of fresh conflict, and that there must be a continual reaffirmation of the whole, then free action takes precedence of the idea of a historical process and *all possibility of a rational construction vanishes*'<sup>1</sup> (p. 157). One would think that all possibility of talking of a 'whole' had vanished as well! But if, indeed, Eucken has any right to speak of a 'whole' at all, if indeed it is true that the inner life exhibits 'in spite of all manifoldness, a permanent character, persisting through all changes and movements' (p. 52), then—unless this permanent character is unknowable—our grasp of it should not only count for much against our relative ignorance of the future, but it should also supply us with a *positive* ideal of action. Again and again Eucken tells us that Spiritual Life means the conversion of the temporal into a timeless order, but to the end he leaves the two points of view, that of a progress in time by a succession of breaks in which the whole is, as a whole, elevated and advanced, and that of the timeless reality of that whole, standing side by side without mediation. One is tempted to guess that he has adopted the former from Kant and the latter from Hegel, though the synthesis by which he has fused them together is so 'creative' as to deserve to be labelled by his own curious combination of adjectives 'positive and irrational' (cf. pp. 83 and 154).

I am not aware that Eucken is acquainted with the works of Bergson. He certainly does not refer to Bergson or quote him in this book. But it is not uninteresting, as illustrating tendencies of modern thought, to point out how much Eucken and Bergson have in common. They agree in making life and life-process

<sup>1</sup> Italics mine.



fundamental; in holding all genuine action to be 'free' and 'creative' in the sense that it cannot be 'deduced' or anticipated; in depreciating the 'mere intellect' because it cannot grasp reality 'from within,' because it moves in universals and abstractions, because it tries to force all particulars into the 'rigid pattern' of its general laws, thus destroying originality and individuality (pp. 84, 85). And we are strongly reminded of Bergson's *durée* when, in the chapter on 'Free Will,' we read that Determinism, in making us the absolute slaves of fate, 'involves the disappearance of the *present*, in any real sense of the word. When there is no demand for decision, no tension and no room for original action, when the future grows out of the past like a flower out of its bud, then there can be only the shadow of a present' (p. 437).

This juxtaposition of the two foremost thinkers of the present day in Germany and France inevitably turns one's thoughts, at the moment of writing, to the war between these countries, the more so as Eucken, in the Preface which he specially wrote for this translation, offers his book as a reminder to European nations of the 'great common tasks by which they are raised above and beyond every national and political difference,' and which will 'counteract the lamentable and dangerous hostility of great nations to one another'. The summer of 1914 supplies an ironic commentary on the words which Eucken wrote in the summer of 1912. There is no word about the relation of war to the Spiritual Life in the body of the book. Yet the question is not so simple as to be settled by silence. General Sherman, who knew war from the fighting-side, said 'War is hell'. Walt Whitman, who knew war from the hospital-side, said 'God damn the wars—all wars: God damn every war: God damn 'em! God damn 'em!' On the other hand Sir Ian Hamilton is reported to have said that 'neither poetry, music, nor religion can long outlive war'. Anyhow, our newspapers—*voces populi*—have no doubt about the spiritual character of war. With hardly an exception they have been telling us that war is an affair of the Spirit, of which the clash of armies and armaments is but the outward expression. Or to look deeper: If it is true that 'in the white heat of war Self will burn and Greater Love rise from the ashes,' if it is true that 'a soul which has never known pain, like a nation which has never known war, has no depth of being,' can we refuse to consider war as a profound spiritual experience? Perhaps, when peace is with us again, the apostle of the Spiritual Life will trace for us the working of the Spirit in this grim reality. We shall understand better, then, what he means by Spiritual Life.

R. F. ALFRED HOERNLÉ.

*Problems of Science.* By FEDERIGO ENRIQUES. Authorised Translation by KATHARINE ROYCE, with an Introductory Note by JOSIAH ROYCE. Open Court Company. Pp. xvi + 392.

THE present work is a translation of the *Problemi della Scienza* of Prof. Enriques, the eminent Italian mathematician. It covers very much the same ground as Poincaré's three books on the philosophy of science. It may be divided into five parts; the first is a general introduction and explanation of the author's position (which he calls Critical Positivism), the second deals with Logic and its applicability to the real world, the third deals with geometry, the fourth with the classical mechanics, and the last with electrodynamics and the alterations which it has entailed in the mechanics of Newton. The whole work gives an impression of very deep and wide learning; Prof. Enriques draws his examples not only from the subjects in which he is specially an expert, but also from economics, jurisprudence, and biology. Unhappily the style is very heavy, and one can never forget for a moment that one is reading a translation from a foreign tongue. The book is also disfigured by an immense number of notes of exclamation, a stop which may safely be deleted from all works except novels. A final word of general criticism is that although this book is of considerable length it deals with so many difficult and important subjects that the argument is obscure through its condensation even to persons familiar with the problems under discussion; to others it must often be quite unintelligible. In some few places Prof. Royce has helped the reader with explanatory notes, and it could be wished that these were more frequent. I do not think that the obscurity of some passages necessarily indicates any confusion in Prof. Enriques' own mind; it is often merely due to the fact that he has treated these subjects in special articles elsewhere and now has to condense his arguments so much that it is difficult to follow them.

The first part, which introduces us to Critical Positivism, is largely occupied with a defence of the philosophic doctrine of relativity. The argument is that wherever we apparently meet with an absolute term or an absolute distinction we really only meet with something that occupies a higher position in a series than some corresponding term with which we have previously dealt. Since the great difficulty of the doctrine of relativity is its ambiguity it is a pity that Prof. Enriques has not considered the question quite generally, but has mainly treated special cases of supposed absolutes and tried to refute their claims. For instance, he discusses the claims of certain problems (like the squaring of the circle) to be absolutely insoluble; of justice to be an absolute duty; of actually infinite numbers, etc. His conclusion is that the problems are only insoluble relative to certain means (*e.g.*, the use of a rule and compass); that justice is only absolute in the

sense that it is the ambiguous name given at any moment to the highest duty recognised at that moment; and, so far as I can see, that transfinite numbers are either meaningless or mere symbols for the indefinite prolongation of certain finite series of acts. I need scarcely say that many of his particular observations are very valuable; there is a pronounced tendency in the human mind to think that any series must have a last term, and this has enabled philosophers to score easy triumphs over the actually infinite by defining it as the last term of an endless series. But on the other hand I cannot see precisely what general conclusion can be deduced from the discussion of a number of claims to absoluteness of such very different kinds, and further I cannot accept all Prof. Enriques' special arguments. For instance justice does not seem to me to be simply the highest duty recognised at any given time; it has a definite content of its own. We may certainly both (a) learn more and more clearly what that content is, and (b) learn more clearly to what this quality justice applies. And these two processes will generally proceed *pari passu*. But this in no way affects the absoluteness of the duty to be just in the only two senses in which any one maintains it, *viz.*: (1) that no action is right that is not just, and (2) that justice is a perfectly definite quality with an absolutely determinate nature whether or no we have fully analysed that nature and clearly seen precisely what is and what is not just.

Again I cannot see precisely what Prof. Enriques' special argument about the actual infinite is supposed to prove. He says that an actual number cannot be defined as the last term of an infinite series, and further that mere consideration of a series by itself will never prove that it has a limit. (I do not know if he means also to imply that you cannot tell whether an infinite series has a last term by considering it alone.) All this is perfectly true, but I cannot see what bearing it has on the reality of infinite numbers, or how it shows that 'the word "infinite" cannot be applied to any given number or quantity' (p. 15). At best it would show that the concept of a *greatest* infinite number is unsound. And the reference here to the difficulties of Mr. Russell's class *w* seems quite irrelevant. As Prof. Enriques is most unlikely to be under any of the common illusions on these questions I can only say that he seems to me to fail to make clear what exactly he is trying to prove. I am the more convinced of this by the fact that he sometimes speaks as if he believed in the actual infinite, *e.g.* he speaks of a logical analysis being in terms of an infinite number of elements. It is true that he says that these cannot be supposed to be all *given*; but, so far as I can see, 'given' merely means 'thought of in succession,' and the question whether this be psychologically possible seems irrelevant to the actual number of elements.

Prof. Enriques is also concerned to show that there is no absolute

distinction between the subjective and objective. Here he is not referring to the distinction between a mental act and its object (though he sometimes seems to be) but mainly to that between the various processes by which various minds reach a result and the common result. I have two criticisms to make here. (1) His argument seems to be that the subjective can itself be made the object of scientific knowledge:—it helps, *e.g.*, to explain the minimum of cases when scientific predictions are not accurately fulfilled. This is true, but surely two distinct things—mental process and ascertained fact—do not lose their absolute distinction because they are alike in the one respect that both are data for science. And (2) this example shows how difficult it is to collect from Prof. Enriques' special arguments what general principle of relativity he is trying to maintain. If we generalised from this example we should infer that he held that there is no absolute distinction between anything and anything else. And this is either too obvious (in the sense that nothing differs in every respect from anything else) or too absurd (in the sense that there are no definite differences in the world) for any one to maintain.

We now pass to Prof. Enriques' treatment of logic. This is praiseworthy in its insistence on the importance and validity of a system of genuinely formal logic. There are also some excellent remarks on the nature of definition. The definitions of Euclid are not real analyses but serve the same purpose as geometrical models. Fundamental notions can only be defined in this way, or else by postulates. Even nominal definitions are not mere shorthand abbreviations; they mark definite and important groups of entities in a science which are worth treating in detail for their own sake. Just as you may start with elements and axioms and build up complex entities by nominal definition; so you may be given in experience something which you find you can best treat by assuming it to be a complex built up from certain elements according to certain laws. This is the case in geometry where what is given is lines and surfaces and we find it conducive to our reasoning to regard these as complexes of points. Prof. Enriques thinks it necessary to deal especially with the case where we are led to assume an infinite number of points (as *e.g.* the continuity of lines and surfaces forces us to do). His difficulty, as I understand it, is this. This kind of hypothetical analysis of what is given into entities connected by laws is only helpful if it enables us to suppose that the fundamental entities *might* be given to us in experience and we might build them up by nominal definitions into the complex entities that actually *are* given. Now when your analysis leads to an infinite number of fundamental entities you could not suppose these to be all given in any experience. Prof. Enriques' solution is that as we can know things about any entity of a class without needing to be acquainted with each one separately the infinity of their number need not trouble us. This is undoubtedly

the right type of answer to all psychological difficulties about the infinite.

There are some interesting reflexions on a subject not often touched by logicians, *viz.* the applicability of the Laws of Logic to the existent world. Prof. Enriques concludes that the necessary condition is that there should be great relative invariance in the existent world; logic assumes strict invariance, and, so far as the existent world departs from this, logic becomes less and less applicable to it. I am not perfectly sure that I understand this; but it seems to mean somewhat as follows. Logical operations and deductions are performed on timeless entities, and the existent world is in time. If you take a number of terms and relations in the existent world at a given moment and deduce something further about them by logical reasoning your conclusions will be rigidly applicable to the same things at the given moment; but it will not be rigidly applicable to the things called by the same name and treated for ordinary purposes as the same at some other moment unless they have remained absolutely unchanged during the interval (or, of course, unless they change in accordance with some law which, while it contains time, contains no particular time). There are however certain passages which suggest a much too subjective view of logic. Thus we are told that 'the formal requirements of logical representation express only a psychological fact . . .' and that 'the psychological associations and dissociations which fall within the realm of clear consciousness and volition constitute the fundamental operations of logic'. With the view that these sentences imply I should wholly disagree.

The part of the book devoted to geometry is of great interest and importance, but is often obscured by too great condensation. Prof. Enriques' main effort is to correlate the axioms of projective geometry with sight-space; those of metrical geometry with the space of active touch; and those of Analysis Situs, which underlie both, with general sensibility both of the skin and of the retina. He of course recognises that in ordinary geometry the data of the various senses have all contributed to the 'smoothing act' of the crude spaces of each. This is a very interesting attempt which, as he says, needs a mathematician who is also a psychologist and a physiologist to work it out. He is not able to go enough into detail for me to judge how far he has succeeded.

It is interesting to note that the author holds that the hypotheses of Euclidean and ordinary Non-Euclidean geometry differ more than conventionally, and that the question of their applicability to the existent world can be treated experimentally without a logical fallacy. On the other hand he seems to think that no possible experiment could settle whether the geometry of the real world is Archimedean or non-Archimedean. It would take too long to enter into this question here; much depends on what is meant by the very ambiguous word 'conventional'.

There are two chapters on Mechanics. The first deals with the notions of the classical mechanics. It sees in their comparative success a further verification of Euclid. There is an interesting discussion on time, mass, and the Newtonian laws of motion. Prof. Enriques rejects absolute space and time, and points out that the notion of mass, though it can be reached in Mach's way, can also be reached in several others which do not assume the Third Law of Motion. Force, again, as something about which our muscular sensations tell us, has as good a right to be taken as a datum of mechanics as have the data of any other sense. Prof. Enriques saves Newton's second law from tautology by substituting the law that the *incipient* motion of a particle relative to any frame of reference is in the direction of the force acting on it at that moment, and proportional to its statical measure at that moment relative to the frame in question. He then has to add a law to enable us to pass from incipient to other motions. This is substituted for Newton's first law, and here we have to notice (1) that a special frame of reference has to be chosen (*viz.* one defined by the fixed stars), and (2) that this law has been proved by the electron theory to need modification for velocities large in comparison with that of light.

The whole book is worth reading and may be recommended to those who are pretty familiar with the problems with which it deals.

C. D. BROAD.

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*Elementary Logic.* By ALFRED SIDGWICK. Cambridge University Press, 1914. Pp. x, 250. Price 3s. 6d. net.

"LOGIC is here treated (1) as a carefully limited subject to get up for an elementary examination; and (2) as a free study of some of the chief risks of error in reasoning" (p. viii). The book is accordingly divided into two parts entitled "The Old System" and "The Risks of Reasoning". It would seem, at first sight, difficult or even impossible to harmonise the two aims which Mr. Sidgwick sets before himself. The necessary bond of union, however, is supplied by the conviction that the traditional Logic is a danger to all who think as well as a nuisance to the few who have to pass examinations in it. In this conviction Mr. Sidgwick is at one with Dr. Schiller. As he himself rather warily expresses it: "At the present day we may safely admit that the best reason for knowing something about the old system is in order to see exactly why modern Logic [by 'modern Logic' Mr. Sidgwick means pragmatic logic] has been driven to make certain far-reaching departures from it" (p. viii). In plain words, one of "the chief risks of error in reasoning" lies in the danger of succumbing to 'ideals' of reason-

ing which, originating in mental inertness, are taken advantage of by traditional Logic so as "to gain a reputation for wisdom at small expense in trouble" (p. 168). Since the function of real Logic must be to guard against real fallacy, it cannot do better than begin by scrutinising that most stupendous and long-lived fallacy of all, which has so artfully appropriated the title of Logic<sup>1</sup> to itself. This should be a sufficient answer to the unintelligent complaint that pragmatists while attacking Formal Logic 'have given us nothing in its place'. What the complaint really amounts to is that they have not given us something *equally Formal*.

Mr. Sidgwick's frank avowal of his attitude towards the ideals of Formal Logic gives him a very real advantage in helping the prospective examinee to 'satisfy' the examiner. Since he refuses to make himself responsible for the pretensions of Logic, he is under no obligation to make it appear more certain, consistent or useful than it really is. Hence the teacher who makes use of this book need no longer find himself compelled *both* to lay down dogmatically that the 'Logic of consistency,' as being the foundation of all reasoning, can itself need no extraneous support, *and* to stave off the unanswerable objections or 'difficulties' of the inquisitive learner by declaring that they receive their quietus in some undefined region of 'metaphysics' where, to the duly initiated, all puzzles are made plain. The Logic which the student must expect to be examined in is neither a science nor an art nor even a useful dodge, but only a game—and a very dull game at that (pp. 1-3). So long, however, as a knowledge of its 'rules' is a stepping-stone to a university degree, it has a real, if strictly circumscribed, practical utility.

The consistent, cold-blooded treatment of Logic from this severely practical standpoint in itself constitutes a most effective criticism of the superstitions enshrined therein. The student who carefully 'gets up' Part I. of the book, even if he does not go on to Part II., should not merely be able to pass with *éclat* his examination in Elementary Logic; he should also pass through the ordeal without sustaining any intellectual damage. If he is really intelligent, he will even derive actual benefit from his studies. If he is further gifted with a sense of humour, he will discover that there is, after all, a considerable amount of enjoyment to be got out of the subject. A few quotations from Part I. will illustrate Mr. Sidgwick's irony in teaching the traditional Logic. His merciless exposure of its futile artificiality saves the earnest student the trouble of trying to find in the subject a meaning which is really foreign to its aims.

<sup>1</sup> "As a help against confusion of the two points of view I shall adopt the plan of spelling the traditional Logic [also Logical, Logically and Logician] with a capital letter and the modern logic with a small one. This seems at any rate a less offensive mode of distinction than by giving the old Logic the doubtful dignity of inverted commas" (pp. viii-ix).





"All that matters from our present point of view is that the division into Subject, Copula and Predicate, is one of the rules we have to abide by. In order to get material for playing the game, propositions must be regarded as made up of two 'terms' (Subject term and Predicate term) *connected by a copula*. It is assumed that there are in existence a large number of words unattached, whether ranged in order as in a dictionary or floating about casually in our minds. You can take any two of them and join them together with a copula . . . and then you have got a proposition, whether true or not. Out of propositions so obtained you can then proceed to construct syllogisms by following certain further rules to be presently explained. To analyse an ordinary sentence and express it so as to show its two terms and its copula is called 'putting it into Logical Form' or 'showing its Logical character'" (pp. 4-5).

"So far as Logic is to be not merely a game but a real help in distinguishing between good and bad reasoning it cannot afford to ignore the problem of translating from ordinary language into the forms; an inquiry which involves some consideration of the 'matter' asserted, and therefore of the intended meaning. It cannot altogether ignore this problem, but it can and does feel reluctance in pressing the inquiry. To ignore it altogether would be to confess its own inapplicability to actual reasonings; to pursue the inquiry is to depart from its own fundamental assumptions; and so it steers a middle course, neglecting the difficulties just so far as common sense can be persuaded that they are negligible. This is a position of unstable equilibrium, and the inevitable fall has already begun" (p. 67).

"Just as Logic has to minimise the difficulty of distinguishing between the 'simple' and the compound proposition so it has to deal lightly with the distinction between one proposition and 'another'; and therefore it takes difference of form, rather than of meaning, as the test of 'otherness'. . . . I assume that the reader at present wants to know what processes are traditionally called Immediate Inference, apart from the question whether the name is satisfactory. In general they may be described as *the processes of translation which are still possible after Logical Form has been reached*" (pp. 85-86).

"It must often strike a beginner in Logic as unsatisfactory that as soon as he has mastered the intricacies of the Categorical Syllogism, and has learnt that all assertion can be expressed in the A E I O forms, he is forthwith introduced to another form of assertion and another kind of syllogism [*i.e.* the Conditional Syllogism] with a different set of rules" (p. 64).

After quoting Mr. Joseph as saying "An equivocal term is not a term without a meaning; it is a term with more than one meaning," Mr. Sidgwick makes the comment: "But this is true only of terms considered apart from their use in a given assertion. For if,



owing to an ambiguity in the term 'Y,' the *statement* 'X is Y' admits of being accepted in one sense and rejected in another, how can we regard *its* predicate term as having now *any* actual meaning? A term which has 'more than one meaning' in a given statement is, for that very reason, 'a term without a meaning,' so far as that particular statement is concerned. It will hardly be maintained that a statement whose interpretation is doubtful *means more* than it would otherwise" (p. 108 n.). The ambiguity here exposed in the expression 'more than one meaning,' with its fatal effect on the meaning of Mr. Joseph's innocent-looking dictum, itself affords a capital illustration of Mr. Sidgwick's doctrine as to the nature and effects of real ambiguity.

I have left myself little space to deal with Mr. Sidgwick's reconstruction of logic in Part II. The philosophical public *ought* by this time to be well acquainted with his views. And now that Mr. Bradley has claimed priority<sup>1</sup> in the discovery that 'formal validity' is no guarantee against ambiguity, the far-reaching importance of Mr. Sidgwick's logical innovations may at last hope to win general recognition. Those who are still unacquainted with them will find in Part II. a brief but admirable exposition thereof.

The *general* principle that underlies the Sidgwickian doctrine is here stated as follows: "The general name or names by means of which the description of S is given in the act of predication *must* (because of their generality) omit to specify the points in which S differs from the rest of the class. For however far we may carry the process of adding closer and closer descriptions of S, the same is true at every step. . . . So that the fullest description that can be given of S—with anything short of infinite time at our disposal—inevitably leaves out some of S's individual peculiarities. However true therefore it may be that S is M, and however lengthy the description 'M' may be, it is also always true that S is M *with a difference*. And in the absence of further knowledge it is an open question whether such difference is or is not important."<sup>2</sup> The risk of its being unexpectedly important is the risk to which we succumb when our middle term becomes ambiguous. S is not only M, but *a*M, and *a* is a quality which may spoil the otherwise justified inference that S is P. This risk, then, is always present when we make a predicative statement, however carefully worded the statement may be. There is no way of escaping it, short of ceasing to make any predications at all. It is the price we pay for the power either of generalising or of describing a Subject; it is a defect that belongs to a quality. . . . As the quality of living involves the defect of being liable to die, so the quality of descriptiveness involves a constant risk of reasoning through an ambiguous middle term" (pp. 196-197).

There is one small point—which seems to me not merely verbal

<sup>1</sup> *Essays on Truth and Reality*, p. 368 n.

<sup>2</sup> Italics mine in this sentence.

—in which I find myself unable to agree wholly with Mr. Sidgwick. What he calls the 'vagueness' of descriptive language, and speaks of as a 'defect' therein, I should prefer, with Dr. Schiller, to call by some such name as 'indeterminateness'<sup>1</sup> for the reason that it does not appear to me to be rightly called a 'defect'. On Mr. Sidgwick's own principles we are not warranted in calling a certain characteristic of judgment a 'defect' *simpliciter* merely because it may operate as such in some particular context—any more than we can call a word really ambiguous except in the context of some actual assertion. In fact the 'defect' in question, as Mr. Sidgwick has shown, is the defect of ambiguity, so far as it operates to make our *reasonings* defective. And in predication, as such, deficiency of 'information' need not be defective information in the sense in which a defect is something to be deplored. True, the 'defect' is irremediable, from the human 'point of view': but the remedy would, for us, be worse than the disease. For no one ever *wants to be told* (or even to know) absolutely everything about S. What we really want is as much detail as is *relevant to the purpose in hand*; and more than this is a superfluity and a bore. Now superfluity, or irrelevance, as Mr. Sidgwick is well aware, is always a very real logical defect. The thorough-going recognition of this is indeed, above everything else, what distinguishes pragmatist from absolutist logic. What, nevertheless, may possibly have misled Mr. Sidgwick is that, from 'the point of view of the Absolute,' the 'universal' element in human knowledge must truly be condemned on the score of vagueness, for by piling up such universals we can never reach 'the really concrete'. For an absolutist, knowledge which is incomplete must necessarily be 'insufficient,' and therefore 'defective'. But for a leading *pragmatist* logician to stigmatise a judgment as 'vague' and 'defective,' because it does not tell us what we don't want to know, is surely somewhat anomalous. Possibly this may read too much into Mr. Sidgwick's use of the word 'defective'. In that case he should at once clear himself from the faint but awful suspicion, which his language engenders, of still harbouring remnants of the absolutist fallacy.

After this slight dissension, it is a relief to draw special attention to the practical suggestions for reformed logic-teaching which Mr. Sidgwick throws out at the end of his book:—

"Such broad statements as, for instance, 'Truth is relative to purpose,' or 'Every individual case is unique,' or 'the details in any fact are innumerable,' or 'the meaning of any statement is determined by the use intended to be made of it on a particular occasion' convey little to us except through the light they throw upon other doctrines of narrower scope [*i.e.* the meaning of these general statements must itself depend on their application]; and I would suggest that, both for teaching purposes and for setting

<sup>1</sup> Cf. p. 180 n., and *Formal Logic*, p. 27 n.

questions in an examination, a good method would be to take any list we choose to make of these narrower doctrines and to trace their connexion with each other and their relation to the few main principles themselves" (p. 240). The following are only a few examples from Mr. Sidgwick's short list which "may serve for a beginning, and is capable of extension to any desired extent":—

" 'A' is A; till we know better.

" 'A' is not not-A; except when it happens to be so.

" A is either 'B' or 'not-B'; or both or neither.

" No statement with a meaning is indisputable.

" All questions are questions of words, even when they are questions of fact.

" All importance is relative to some purpose.

" A mistake of fact always implies a misapplied distinction.

" Definition, to be effective in removing an ambiguity, must be a postulate, and not a statement of fact.

" Proof is never coercive."

It will be clear from these examples that this logic-book, which calls itself 'elementary,' resolves the old Logic into its elements in more senses than one.

HOWARD V. KNOX.

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*Hauptfragen der modernen Kultur*. Von EMIL HAMMACHER, Privatdozent der Philosophie an der Universität Bonn. Druck und Verlag, B. G. Teubner, Leipzig und Berlin, 1914. Pp. iv, 351.

THIS book belongs to the reaction in favour of metaphysic, which it has been pleasant to notice in recent German work. But it unites with a fine mystical creed a curiously pessimistic outlook upon current tendencies, pressing to extremity a critical attitude towards the culture of the modern democratic world, an attitude for which, more temperately adopted, there is a good deal to be said.

The treatise consists, I should explain, of a "Historical and Systematic Introduction" of ninety pages, the latter sixty pages of which contain all that the author says of technical philosophy; and of a second part, comprising the "Critique of Modern Culture," which deals in 200 pages with social, economic, religious and æsthetic questions of the day in their peculiarly German aspects. There is an Appendix with copious notes, and references to recent German literature.

I will first sketch the general argument with its remarkable conclusion, and then say a word on the philosophy.

The ultimate fact of modern culture—so the author believes—is the will to advance towards self-conscious living. But so great is

the specialisation of thought and of practice, owing to the accumulated stores of knowledge and of capital (the parallel is insisted on throughout) that real understanding and practical self-guidance have become impossible for the "mass," the average of humanity. Thus the level of conscious or reflective living can in their case never transcend either that of a rationalistic expediency (the idea of Society having, by the fundamental modern error, been substituted for the true metaphysical idea of Superindividuality) or that of a merely traditional religious superstition, which is a reaction against the former, and on the same moral and intellectual level. Now this spirit of expediency, the culture which belongs to popular "Scientific" realism, has essentially the note of "becoming" and "seeking". It has no element of satisfactoriness or finality, but aims at accumulation of goods, and conquest of the material world by practice and knowledge *ad infinitum*. How extraordinarily like Aristotle's diagnosis of the financial spirit as such !

This characteristic excludes any possibility of peace or rest in unity with the universe. The author applies to it, as the "life-style" of our age, the term Impressionism, indicating at once the apotheosis of the momentary vision, and the analysis of every object into mere relations and unlimited distances. This is opposed to the idea of Impressionism which one derives, say, from Mr. Stevenson's *Velasquez*, the whole point of which is that the sense of totality is preserved.

A *prima facie* Pessimism therefore holds the field. Western civilisation is decadent and doomed ; and the reflective self-consciousness of our proletariat excludes the hope that a new spring of life may arise within it. It was the ignorance of the poor in the Roman empire that gave them a chance of opening their minds to Christianity.

But yet, for the author, pessimism is not ultimate. In his view there is a secret of the universe in which peace and satisfaction are attainable ; and towards which modern culture is directed, if I understand him right, essentially and inherently through the impulse to intensified self-consciousness, but nevertheless, no less essentially, without hope or chance of adequate attainment. For the secret is metaphysical, and lies in the mystical unity of God and man. But the modern "masses" are too reflective to accept this truth in the form of simple religion, and too superficial to receive it in the shape of metaphysic. Their shallow rationalism of expediency is for them ultimate. The author refers to the *Monistenbund* and kindred associations, and I am sure that in a great measure his notion of "the masses" is drawn from them. Whereas, he lays it down, the ideas of a small instructed minority cannot constitute a living religion.

Yet the fall of our civilisation, which he confidently predicts, the end of the human race, or the destruction of the earth, from the realist's point of view the ultimate disaster, seem to the author no

ground for pessimism. On the contrary the danger of such events is the final demonstration of supreme values in the universe.

It would prove—it does prove—that our culture, in spite of appearances, is not directed to expediency; but has an intrinsic value as an end in itself. And in this sense, he adopts Spinoza's "brave word" about death.

The difficulty which is thus stated in a highly exaggerated form—the need of a new religion and the impossibility of obtaining it from metaphysic—has been touched upon of late by several of our best thinkers. The author's peculiarity is that he not merely refuses to make the progress of our species the article of a standing or falling universe, for here many of us would be with him; but he definitely sees hopeless contradictions and signs of coming fate in all the social and intellectual movements which to most of us appear relatively hopeful, *e.g.* democracy, the women's movement, recent art and literature, popular education.

The basis of his whole attitude is in his metaphysic and Erkenntnisstheorie. It is fundamental for him that standards of value must be "metaphysical," and cannot be drawn from experience, especially not from *de facto* history. Therefore everything hinges on his theoretical establishment of Absolutism and Mysticism, to which we must now turn, passing over the long and interesting discussion of German culture-problems, with the observation that the author is a moderate Bismarckian, and repudiates the extreme ideas due to Nietzsche, insisting more particularly that it is not Christianity, but rather popular rationalism, which should be ranked as Herd-morality. I suppose, however, that the contempt for the masses and the average, in which the author is strangely at one with Eucken, is an inheritance from Nietzsche. I do not in the least believe in these notions about the "masses," having never met any one who seemed to me all round less human than myself. I believe that a sound religion is their natural attitude, and that their hold on fundamental truth is singularly strong.

He begins his construction with the old anti-sceptical argument from the self-contradiction of denying all truth, which he treats as a deduction from the conditions involved in asking a question, or as "the presupposition of dispensing with presuppositions". He calls this the synthetic *a priori* method, as opposed to any which argues back from assuming the validity of the Sciences (analytic method); and he also contrasts it with Hegel's Dialectic which gives no deductive account of its starting-point, and again with Nelson's intuition and Husserl's self-evidence, which he criticises as merely psychological. I agree here that intuition and the mere *Erlebniss* of self-evidence do not help; but I think that the dialectic method, and (what the author also repudiates) the phenomenological consideration of the import of affirmations, are essentially one with the author's own proof. The whole thing comes back, surely, to understanding that you cannot deny an affirmation except by

another affirmation (or positive basis of denial), and therefore you cannot deny the affirmation of the transcendent as such, but only correct it. And when you set about correcting it you are embarked on the dialectic process. I do not think that such a deduction properly falls within Erkenntnisstheorie. It seems to me to be metaphysical. And indeed, in a note in the Appendix, the author admits (to Nelson) that "Erkenntnisstheorie cannot prove the validity of knowledge, except by presupposing it".

Having thus got a foothold in an undeniable affirmation of Something, he proceeds to connect with it unity, plurality, and relation as *a priori* categories, which constitute a framework of timeless truth, which necessitate however a reflective subject in time, and within which are found as an "empirical *a priori*," time and space, the categories of the finite.

At this point we are encountered by a violent dualism. The detail of experience, the filling of time and space, is non-necessary, and no deduction can connect it with the characters of time and space. And thus, because in experience we have a non-necessary subject with a non-necessary object, we leap to the inference that these are the incarnation of an "ought". Experience then is essentially a struggle to realise reason, involving a battle of its elements for the occupation of a place in space and time.

From the "ought" thus deduced, which takes the shape of the great types of culture—science, morality, art and religion—are derived the standards necessary to a judgment of history and civilisation—standards of value which as we see no realism or empiricism can supply.

Man, then, has a place in the "metaphysical," in the author's quaint language. I understand the meaning to be that he stands for all finite beings who are not merely animals but valuing animals. As such, he has a non-recurrent history which incarnates the "ought," and so is a revelation of values. He is thus seen to have a superfinite (*überendliches*) nature; and it is only necessary to establish that the Absolute or total reality is "mind," which is affected by an argument somewhat lax in form, that the inferior type must follow the nature of the superior, in order to join the finite being with the whole as a finite subject united with the infinite.

The peculiarity derived from the deduction of historical experience distinguishes this course of thought from that *e.g.* of Hegel. For the struggle embodied in the very being of God or the Absolute (they are not distinguished) is one of uncertain issue, as apparently in Eucken's theory; and the necessary revelation in finite existence of an Absolute which is a genuine whole is condemned as leading to inactivity, an argument familiar in James as also in Eucken.

The steps of the metaphysical argument, to which in this brief outline I cannot have done justice, do not appear to me sufficiently

critical or precise to be of very high value. For instance, the sense in which the Absolute is "mind," and is a "timeless becoming," needs more definition than I can perceive that it obtains. But I set them out because they illustrate so emphatically the determination of many mystical thinkers to have it both ways—to retain the uncertain issue which the moral attitude appears to demand and to limit the divine nature accordingly, and yet on the other hand to maintain an underlying mystical unity in view of which the *de facto* issue of the moral conflict is either a certainty or a matter of indifference. Now it is right, in my judgment, to treat finite beings as essential in the realisation of the good and yet not to stake our ultimate faith in the universe, on the ups and downs of a series of temporal events. But it is surely an untenable dualism to accept in principle as it were a pessimism as regards phenomena, along with an optimism as regards things in themselves. And the prevailing tendency to this attitude depends on a half-heartedness which refuses to think out how perfection can be revealed through imperfection.

BERNARD BOSANQUET.

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*The Idealistic Reaction against Science*. By Prof. ALIOTTA.  
Translated by AGNES MCCASKILL. Macmillan. 1'p. xxii, 483.

THIS translation of Prof. Aliotta's extremely learned and valuable work will be of great use to philosophers unacquainted with Italian. The original was reviewed at length in vol. xxi. of *MIND* by Prof. Taylor, to whom the English version is dedicated. But considerable changes have been made by Prof. Aliotta, so we have largely a new book. A good many of the criticisms on Russell's earlier views of geometry and on the Marburg school have disappeared, and there is a new concluding chapter containing a sketch of the author's own philosophical position.

I shall begin with a few words on the translation; shall then notice certain points in the older parts, not discussed by Prof. Taylor; and shall finally say something about Prof. Aliotta's own views as presented in the new last chapter.

The translation is on the whole sound and intelligible, though scarcely inspired or inspiring. But there are a few criticisms to be made. On page 91, 'ethic' as an adjective is hardly English. On page 130 the following sentence is clumsy and liable to give a totally wrong impression: . . . 'time . . . and mathematical space, constructed so as to be able to act upon things'. This suggests that it is time and space that act on things, whilst what is really meant is that they enable *us* to act on them. On page 173 Prof. Aliotta is made to talk of 'the transmission of light through the air'. He of course means (and, in the original, says) 'through the

ether'. On page 179 there is a misprint, 'word' being written for 'world'. On page 198 the phrase "the *convenience* of two representative contents" is not the proper translation of *convenienza*; the meaning is clearly 'agreement' or 'conjunction'. On page 201 'conscient' is rather unusual English; why not say 'conscious'? On page 204 I cannot conceive what is meant by saying that the Ought 'derives its adhesion from a judgment'. On page 224 in the twelfth line from the bottom 'himself' should clearly be 'itself'. On page 291, line 21, a 'not' has slipped out before 'suffice'. On page 341 there is a curious error which has been carried over from the original, whereby an article by Klein is dated 1807. On page 376 we are told that Gibbs conceived atoms as 'independent of an infinite number of variables'. This is a literal translation of the original, but, so far as I can see, it is meaningless in English. I suppose it to mean 'functions of an indefinite number of independent variables'. Finally on page 470 a celebrated sentence of Leibniz is misquoted. Leibniz did not say: *Dum Deus calculat fit mundus* (which would have been scarcely respectful) but *Cum Deus calculat fit mundus*.

To turn to the older contents of the book, is it fair to talk of Dr. McTaggart's philosophy as a 'mystical degeneration of Neo-Hegelianism'? Prof. Aliotta seems to confuse two questions: (1) Do McTaggart's conclusions agree with those reached by certain mystics? and (2) Does he reach them by philosophic argument or by mystic vision? To answer the first question affirmatively does not give one a right to talk of 'mystical degeneration'; and, with regard to the second, it is clear that (however much we may disagree with this opinion) McTaggart does hold that he proves his mystical conclusions by philosophical arguments.

Prof. Aliotta has an ingenious argument to prove that there is no incompatibility between Euclid and the other two types of geometry. The point is that you call certain curves in Euclidean space non-Euclidean straight lines, and that it is not surprising that these have qualities different from Euclidean straight lines. On the other hand Euclidean geometry is the most general, because, whilst you could represent all non-Euclidean curves in Euclidean space, you cannot represent Euclidean parallels in non-Euclidean space. If Prof. Aliotta be right non-Euclidean geometries are simply fragments of Euclidean geometry. I think that Prof. Aliotta is on the track of the truth here, but he has certainly not reached it. There are curves in hyperbolic space that correspond to Euclidean parallels; *e.g.*, it is just as true to say that the geometry of the horosphere in hyperbolic space is Euclidean, as to say that the geometry of the pseudosphere is Euclidean space is hyperbolic. So the relation of the two geometries can hardly be that of part and whole. Again in hyperbolic space there are equidistance curves which are not hyperbolic straight lines but correspond in some ways to Euclidean parallels.



With regard to Prof. Aliotta's view that the logical definition of order is circular, I suggest that the very appearance of circularity vanishes in an inflected language. It sounds plausible to say that there is a circularity in defining order in terms of the difference between such propositions as *James loves Peter* and *Peter loves James*. But it ceases to be plausible when you define it in terms of the difference between such propositions as *Jacobus Petrum amat* and *Jacobum Petrus amat*. And, with regard to the alleged circularity in the definition of numbers (*viz.* that it involves the recognition of a plurality) it must be noted (1) that a plurality is not a number; (2) that there is nothing circular in being acquainted with what you are defining: it would not be much use defining anything with which you had no practical acquaintance; and (3) that, if Prof. Aliotta's objections were valid, all definitions of the word 'word' must be circular; for they all involve the use of words. And this seems to be false.

In the argument (p. 336 *et seq.*) about the New Realism it is evident that Prof. Aliotta holds that the doctrine of external relations is incompatible with causal interaction. This is a mistake. The doctrine of external relations only says that the fact that A and B enter into a relation R does not *logically* involve any change in their qualities; it never denies that a change of qualities may follow *causally* in time. Hence it is quite idle to oppose to the view that awareness of an object makes no difference to it the fact that the awareness is produced by the causal action of the object on the mind.

Let us now consider Prof. Aliotta's own views. His concluding chapter consists of an admirable defence of the theoretical value of science as against irrationalists of all kinds, and of an attempt to prove a kind of spiritual realism involving the existence of God. The first part is full of good things. The intuitionist who attacks science is reminded that he first makes an abstraction of scientific concepts from all matter of perception—a thing which the scientist himself never does—and then says that science presents us with a mutilated fragment of reality. To this Prof. Aliotta answers that, whilst all science must practise some abstraction, the world of perception seen as a connected system subject to scientific laws is something much fuller and richer than any momentary intuition unenlightened by thought can give.

Another excellent point is scored against Mach and his school who hold that it is only by chance that mechanics has been taken as the fundamental science. Such thinkers forget that motion as treated in mechanics is not perceived motion but is an intellectual construction suggested by the latter. This concept can be dealt with scientifically, and, by correlation with it, the data of the other senses can be made objects of scientific study; but if, as Mach suggests, we had started from our temperature experiences, they would have indicated no comparable intellectual concept to us.

Prof. Aliotta's positive views do not strike me as being so good as his criticisms. His argument seems to be as follows. We must assume that our own minds exist and that our knowledge of them is perfect as far as it goes (*i.e.* there can here be nothing corresponding to illusions of sense). But our thoughts claim to refer to objects that exist when we are not thinking of them. Hence, even if we wanted to be solipists, we should have at least to admit the existence of unconscious processes in our minds and permanent traces of past events. But, as soon as we do this, all ground for solipism vanishes and we can discuss the *nature* of an external world without further question as to its reality. It cannot consist of a single all-embracing thought of which our minds are parts; for then the impenetrability of one finite mind to another would be inexplicable. But neither is there any reason to think that it consists of nothing but other finite minds of various orders of intelligence. If what we call matter consist of minds they will be so unlike our own that this piece of knowledge will not be worth having. Yet we can be quite certain that external reality is not unknowable; for in order to say anything about it we have to apply *our* categories like being, cause, etc., to it. And we do actually find that the external world can be successfully dealt with by *our* categories. The conclusion is that the external world is striving towards intelligence but has not reached it, and that it only reaches it when it is understood by us. Our knowledge of matter really does make a difference to it; it, so to speak, raises it to our intellectual level. Matter then exists for an end, and is subject to the norms of mind. But an end can only be operative through the actual existence of an idea of it; now matter does not know that it is aiming at intelligence nor are we constantly trying to raise matter to our level. Hence there must be a God who is intelligent and has adapted matter and our minds to the progressive realisation of more and more complete intelligence. It is he who creates a rational mind whenever certain material conditions are fulfilled, and it is he who preserves the validity of the norms of thought when actual thinking disobeys them. Prof. Aliotta refuses to make a sharp separation between pure and practical reason; his proof of theism rests on what Kant would have called pure reason, but it is of the same type as Kant's own arguments from practical reason, and, if these be valid, they will furnish another equally good proof.

These arguments do not convince me. (1) They rest on the view that the categories are in some sense part of the framework of our minds which we impose on external things. It then becomes necessary to explain how it is that our thoughts fit things. But this view of categories seems to me wholly mistaken. I quite agree with Prof. Aliotta that we do not learn that there is such a thing as causation either (*a*) by direct sensible experience, as we learn that there are colours, or (*b*) by inductions founded upon

sensible experience. But this does not mean that the category itself is in any sense a part, state, quality, form (or what you will) of our minds which we impose on things. Our thinking does not impose *e.g.* causation on things, but finds that things exemplify it. We might put the argument in this way: Either events do have causal relations independently of our thoughts about them or not. If not then things are not adjusted to the mind and Prof. Aliotta's arguments based on this adjustment would break down. But if so (as Prof. Aliotta himself so ably argues) then there is no problem of *adjustment*; our thought *discovers* causation by reflecting on the processes of nature just because these processes are instances of causal series. The only thing left to explain is the fact that our mind can discover the universal in its particular instances. (2) I find Prof. Aliotta's own explanation of the nature of the adjustment difficult to follow. Things are adjusted to our minds because they are tending towards intelligence. This is ambiguous, and the ambiguity appears noticeably in Prof. Aliotta's discussion. It might mean that things are tending to become intelligent or that they are tending to become intelligible. Prof. Aliotta's view seems to be that the former implies the latter. But, as far as we can tell, it is only the matter that forms part of brains that can be said in any sense to become intelligent. On the other hand this is not the only matter that can be understood, nor it is the best understood matter. If we take the other interpretation and say that matter is adjusted to our minds because it is tending to become intelligible we merely commit the folly of saying that matter *is* intelligible because it is tending to become so. And this is not, I think, Prof. Aliotta's view.

And I do not see how the hypothesis of God will help us here. Are we to say that the matter which is intelligible and yet does not form the part of any finite brain is really intelligible because it forms part of God's brain and has thus become intelligent? This does not seem to be Prof. Aliotta's view. His view seems to be the still stranger one that matter is *now intelligible* because God knows and has arranged that it shall *some day be intelligent*. I really cannot see the least connexion between the actual fact and its alleged ground here. Even if we take a much more moderate view, which Prof. Aliotta sometimes mentions and seems (quite wrongly) to identify with his view that to be intelligible a thing must be tending towards intelligence, we shall not reach the required conclusion. Grant that God must be postulated to endow certain aggregations of matter (brains) with consciousness if thought is to be regarded as trustworthy. This only proves that if *any* matter is to be understood *some* matter must be endowed by God with a suitable understanding. But it has not the least tendency to prove that *all* matter that can be understood must be tending to be or capable of being endowed with understanding.

I have insisted more on my disagreements than on my agreements with the author. But I wish to close with a tribute to his learning, fairness, and acuteness; and I heartily welcome this translation of his book on behalf of English philosophic students.

C. D. BROAD.

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*Il Vecchio e Il Nuovo Problema Della Morale.* By E. JUVALTA. Bologna, 1914. Pp. x, 135.

PROF. JUVALTA rightly considers that morality as a science took an entirely new start with Kant. Before that philosopher wrote the principles of human conduct had been regarded more or less as a question of individual interest. Even the austere Butler confessed that as a matter of cool calculation no man could be expected to sacrifice his happiness to that of other men. The good Bishop knew that morally such a sacrifice was sometimes incumbent in this life; but he got over the difficulty by referring us to another life. Kant's attitude is a little ambiguous; but his Categorical Imperative may be accepted without accepting his theology, his personal belief in which is indeed doubtful. But with Prof. Juvalta the moral imperative is really categorical—it is an absolute imperative, not to be confounded with any other motive, dictating without reference or appeal the course of action to be pursued.

The other supposed sources of morality are briefly passed in review and shown on analysis to be either invalid or to involve surreptitiously the very Categorical Imperative that they are designed to supersede. An ethics based on theology must be either unmoral or unmeaning, seeing that religious people only do what God commands because it is right; nor can we know that what He commands *is* right unless we know the meaning of rightness from some other source. Nor is it permissible to deduce morality from the nature of things, whether statically or dynamically regarded; for that can only be done by first reading morality into nature. Thus the theory that distinguishes "degrees of reality" in the external world in fact discriminated between those degrees by their relative approximation to moral perfection. And similarly those philosophers who judge of human conduct by an evolutionary standard are assuming, to begin with, that evolution progresses on lines of advance to moral perfection. Prof. Juvalta must not be understood to deny this tendency as a historical fact; only his contention is that evolution does not give but finds and applies the moral law. This originates from within not from without, and it is primarily concerned neither with the reason nor with the sensibilities—*aesthetic* or other—but with the Will.

Prof. Juvalta is not a hedonist in any sense, universalistic or egoistic, nor indeed does he seem very careful to distinguish between the two, incidentally referring to altruism as a taste like

another, not necessarily associated with genuine morality. The dictates of utility may very well coincide with the moral law but they do not give it; they are not imperatively binding on the will. Here the Italian philosopher seems to go beyond Kant, who at any rate admitted that the happiness of others though not his own should be the moral agent's end. By the way one does not precisely see how Kant got hold of this altruistic happiness-principle except empirically, from contemporary opinion, nor how it fits on to the transcendental principle that all rational beings should be treated as ends, never as means. The last-mentioned canon seems to be constantly violated in war, where human lives are sacrificed wholesale every day without moral rebuke for the purpose of winning important military positions. Prof. Juvalta suffers under the same difficulty as Kant. He also has to extract the content of morality from its form. With no guidance either from theology or from natural knowledge or social utility, from the mere fact of obligation we have to discover what it is our duty to do.<sup>1</sup>

For a solution of the problem recourse is had to two methods. In the first place, with the modern theory of a categorical imperative is combined the still more modern theory of values. I say 'modern' for the word itself goes back, I believe, no farther than Lotze; but the thing itself is very old. According to Plato Justice is the greatest of all goods and should be sought after without the hope of a hedonistic reward either in this life or in another. The same principle was strictly carried out by Stoicism; and even Epicurus could profess to be perfectly happy when dying in agonies of pain. But after all the voluptuary may and will decline to accept the moralist's scale of values, refusing to do his duty unless forced thereto by the primitive application of pains on the part of the State. And so the second method comes in, under the form, as would seem, of an appeal to the authority of public opinion. The point is one on which I cannot speak with complete certainty; for Prof. Juvalta, who generally writes clearly, writes also with extreme concision, giving neither illustrations nor developments; and in this instance concision is not favourable to clearness. The case as he puts it is this: Life has various competitive ends; and as a matter of simplification it has been attempted to resolve morality into one or other of these, to explain it by self-interest or the interest of others, by the love of beauty, or intellectualism, or religion. Each of these pursuits assumes a compelling form of its own and awakens a peculiar force of conscientious obligation in its devotees. But for its matter each has a certain set of duties whose fulfilment is demanded in preference to all others. Each has its own values, which are cultivated in a narrow and exclusive spirit; but nevertheless they occupy a certain amount of common ground; their attainment postulates the performance of certain

<sup>1</sup> The problem is not new; it beset Dr. Whewell when he held the Chair of Morals at Cambridge.

conditions necessary to all. Among these may be mentioned zeal, perseverance, self-control, and daring. And this involves the recognition as values of personal liberty and integrity, the observance of contracts, the exchange of good offices, and so forth, together with the habits, institutions, and laws insuring the preservation and increase of these conditions. And by following out this method we finally arrive at the primary and fundamental values of every moral system: Liberty and Justice (pp. 94-105).

Much of the above seems good and true; but it strikes the present reviewer that more satisfactory results might have been reached by an easier and less artificial process of reasoning. There are great systems of morality in which neither liberty nor justice, as we understand them, find a place. They might be sought for in vain in a recent manifesto signed by the representatives of German art, intellect, and religion. The values of life depend on life itself and on its conditions. There may be a morality even in the face of certain death. Sidney was mortally wounded when he handed over his glass of water to the soldier who, for all the story knows, may also have been doomed. Another point raised by this whole discussion is the interest of the lower animals—a subject never once touched on by Prof. Juvalta in the whole course of his book, nor involved in the principles he lays down. It was summarily brushed aside by his master, Kant, but a moralist ought to know better now. We are told that the conscience of Abraham Lincoln gave him no rest until he rode back half a mile to extricate a pig from a swamp where he had seen the animal vainly struggling. A somewhat similar story is told of the Sultan Mohammed II., and others besides; but the very facility with which the anecdote migrates from one celebrity to another proves how inseparably associated the duty of relieving pain, wherever it occurs, has become with the binding obligations of conscience.

And this widened view leads us on to another issue of the gravest importance. Admitting the supreme authority and sacredness of moral obligation, does it follow that the Categorical Imperative cannot be analysed into or deduced from any wider form of ideation? Like Kant, Prof. Juvalta seems to be a spiritualist who holds that such a derivation is impossible. But here we come up against another problem. One may admit that the evolution of man with all his rational and moral endowments from a creature without reason or conscience is not yet proved. But such an evolution is at any rate incomparably more probable than the transcendancy of the moral law. 'Given the elements of any brute to evolve the perfections of any angel' was the epigrammatic defiance flung down by James Martineau to the empirical school of psychology. Philosophers must now put it the other way round. The angel has to be derived from the ape—or from its equivalent.

A. W. BENN.

## VII.—NEW BOOKS.

*Mechanism, Life and Personality. An Examination of the Mechanistic Theory of Life and Mind.* By J. S. HALDANE, M.D., LL.D., F.R.S., Fellow of New College and Reader in Physiology, University of Oxford. London: Murray, 1913. Pp. vi, 139. Price 2s. 6d. net.

THESE four lectures form a valuable contribution towards the fulfilment of the task of "bringing the great biological movement of the nineteenth century into definite relation with the main stream of human thought". They are very skilful, and though they will not please either mechanists or vitalists, they are notably fair-minded. In the first lecture, indeed, we are almost persuaded to be mechanists. For the organism is of a piece with its surroundings; it obeys the laws of energy; it makes no difference to the energy balance whether it is conscious or not; its activity consists of physical and chemical processes; the application of the methods of physics and chemistry has yielded the science of physiology; the nervous inter-connections and the diffusion of regulative secretions by the blood account for the co-ordination of the various mechanisms that make up the body; in short "the peculiar phenomena of life are due to the play of the physical and chemical environment on intra-protoplasmic mechanisms which have been evolved through the influence of natural selection acting for ages." When bio-physics and bio-chemistry are taken away from biology, there is nothing left!

Having given a very attractive picture of mechanistic interpretation in the first lecture, Dr. Haldane proceeds in the second to show that it is an illusion. In the light of subsequent lectures we know that he regards it as a bubble, but he does not tell us the whole truth too suddenly. "Somehow or other a living organism never *seems* to be a mechanism, however often it may be called one." This intuition is corroborated by scrutiny. The nervous mechanism, for instance, is a misnomer, for "in identifying stimulus and response with physical or chemical cause and effect the mechanistic theory makes a gigantic leap in the dark". Physical and chemical methods are of course useful for studying the physical and chemical processes that go on in the body, and they give us physical and chemical results, which suffice for isolated processes and are useful for certain purposes, *e.g.* in medicine and dietetics. But the problems of biology cannot be solved piecemeal, for they are problems of life; and Dr. Haldane maintains that there is not forthcoming any physico-chemical explanation of any vital function,—of muscular movement, of a nervous reaction, of secretion, of respiration, of excretion, or of any functional activity whatsoever. It is obviously very important to have this statement from a physiologist of high standing, and we would quote a sentence (p. 47): "To sum up, the application to physiology of new physical and chemical methods and discoveries, and the work of generations of highly-trained investigators, have resulted in a vast increase of physiological knowledge, but have also shown with ever-increasing clearness that physico-chemical explanations of elementary physiological processes are

as remote as at any time in the past, and that they seem to physiologists of the present time far more remote than they appeared at the middle of last century".

It might be said that this is an *argumentum ad ignorantiam*, and it would be so if any vital function admitted of adequate physico-chemical interpretation, but Dr. Haldane points out that mechanistic physiology has not won any success. If the outlying forts had been stormed, one might fear for the central citadel; but it is not so. The self-regulating correlation of parts, the continual maintenance of specific organisation and activity, the phenomena of reproduction and development, and so on: "no physical or chemical explanation of them is remotely conceivable".

"What the mechanistic theory must assume in the case of an organism such as man is a vast assemblage of the most intricate and delicately adjusted cell-mechanisms, each mechanism being so constituted as to keep itself in working order year after year, and in exact co-ordination with the working of the millions of other cell-mechanisms which make up the whole organism." And all this must be condensed into a germ-cell, which will fuse with another, and divide many times, and develop into an organism—the implicit becoming explicit again. It seems far away from mechanism. While we agree with the author in thinking that a mechanical interpretation of heredity and development is out of the question, we are not prepared to abandon Weismann's far from mechanical hypothesis of the germ-cell as an implicit organism, consisting of a multitude of living determinants or primary constituents or factors, often in multiplicate representation. We cannot explain any case of cell-division in terms of anything simpler. It is a vital process; but the division of an amoeba in the pond and the division of the fertilised ovum of a higher animal surely differ only in degree. When Dr. Haldane says that we have to postulate for the germ-plasm 'on the one hand absolute definiteness of structure, and on the other absolute indefiniteness,' he is not so convincing as usual, for the definiteness refers to the specificity of the organisation and activity, and the indefiniteness to the power of dividing over and over again. What is the antithesis?

Becoming convinced that the mechanistic interpretation does not work, we naturally seek for a vitalistic one,—that there is operative in organisms some agency which does not appear in the purely physical domain. Some sort of guiding and controlling influence is manifested only in living organisms, and acts in a manner wholly different from anything known in the inorganic world. But Dr. Haldane will not allow us to take refuge in the hypothesis of a 'vital principle' or 'entelechy'. He is as stern with the vitalists as with the mechanists. He maintains, for instance, that "any 'guidance' of living organisms by the vital principle would imply a creation or destruction of energy," and imply "a definite breach in the fundamental law of conservation of energy". It should be noted, however, that Driesch very stoutly denies that this would necessarily follow. Haldane brings forward other objections, such as this, that an effective internal guiding principle would require a superhuman knowledge in order to guide aright. We do not follow the answer given on page 27 to Driesch's second proof of vitalism. But the fact is, that the arguments in favour of the vitalistic interpretation are mostly found in the breakdown of the mechanistic; and every one admits that to prove one solution wrong does not prove another right, unless the answer must be either the one or the other. Dr. Haldane proceeds to develop a third position.

When we pass from the inorganic world to the life of organisms, we need new concepts, for the old ones do not fit. We must utilise the concept of the living organism, an autonomous whole, the several ac-



tivities of which are all determined in a definite relation to the activity and structure of the whole. "There is constant active maintenance, constant renewal, constant breaking down and reproduction of the living structure; and this is of the very essence of our conception of life." "All living structure is active structure; and it lives in actively maintaining itself and reproducing its structure." Both structure and activity are the expression of an organic and indivisible whole.

The idea of life is nearer to reality than the ideas of matter and energy, but the idea of personality is nearer still. "The man as a person is more than the man as an organism; but we must not make the mistake of supposing that he is anything different from his organism perceived and understood more fully. It is absolutely vain to attempt to separate in any other sense the personality of the man from his organic life." The relation between mind, organism, and matter "is not a spatial one, capable of being stated in any sort of terms of interaction. The relation is simply one of different degrees of nearness to reality in the manner in which phenomena are described." "In actual fact we do not understand, except in the most imperfect manner, the reality which lies behind the appearance of a physical world. But we understand enough to be certain that this reality has, and can have, no existence apart from personality, since existence itself has no meaning apart from spiritual existence." Just as we must seek to throw the light of the organism-concept on the domain which for certain purposes we call purely physical, so we must throw the light of the personality-concept on both. It is thus that the author carries the war into the enemy's country and wins a notable victory.

J. ARTHUR THOMSON.

*Henri Bergson. An Account of His Life and Philosophy.* By ALGOT RUHE and NANCY MARGARET PAUL. Macmillan & Co., 1914. Pp. vii, 245.

This is by far the best, as it is certainly the most complete, account that has so far been published of Bergson and his philosophy. Mr. Algot Ruhe is a Swede, and has translated Bergson's works into the Swedish language. The translation is in six volumes, and this book is his own introduction to that work. Mr. Ruhe knows his subject perfectly and has studied with minute care everything of M. Bergson's which has appeared in print. He is also to be congratulated on his collaborator. Miss Paul is one of the English translators of *Matière et Mémoire*, and it is no doubt due to her and to her full acquaintance with M. Bergson's works that this volume is an original English work and not merely a translation from the Swedish.

The book is not an exposition of Bergson, still less is it a criticism. It is a simple and full account of the philosophy, often in the very words of the original. It is not intended to take the place of the philosopher's writings, but to be in the full sense of the word an introduction, easy for those who like to have a complete account of their author and his work before they begin a detailed study, and useful as a companion to those who know their author.

The life of Bergson is not characterised by striking events. It is to be read in his work. A studious scholar, a hardworking schoolmaster, a university professor, from the first and throughout deeply intent on the problems of life and mind, the chief crisis of his life was the decision he had to make as to whether he would specialise in classics or in mathematics or in philosophy. Winning his way by sheer hard work and

intense living interest in his work he came to be recognised as the leader of a new direction in philosophy, and suddenly found himself world-famous, he knew not why. Since then his main struggle has been to pursue the work to which he is devoted amid the distractions of a world-wide correspondence and the desire to respond to the solicitations of admirers and friends. For the charm of Bergson is personal as well as literary, as all who have been privileged to hear him lecture know.

We are told of his quiet home in Paris, its shady seclusion and easy access to the centre of the life of the city, and of his villa in the Jura overlooking Lake Lemman, where he spends the summer preparing his college courses. But intensely interesting are the early papers and essays, mostly inaccessible, which are here described or quoted. We are able to see the beginning of Bergson's great ideas and the characteristic direction of his thought. Perhaps the most remarkable is the earliest of all, an address at a school distribution on the subject of specialisation. "It is because we have looked at reality itself as it were with a microscope, that we have divided it into parts. If we do not begin by giving a glance at the whole, if we pass at once to the consideration of the parts, we may perhaps see very well, but we do not know what we are looking at." Have we not here the simple ground of the doctrine of intuition and intellect? This address was delivered in 1882, Bergson being then twenty-three, and holding his first appointment as schoolmaster at Angers. A year later he received an appointment at Clermont Ferrand, and the five years that followed were the most important of his life. They are here described as a "spiritual retreat," for during that time although his work was heavy "all the main lines of his philosophic structure were laid down and he prepared himself by special studies for its building". At the end of the time he had produced his two theses for the doctor's degree, one in Latin: *Quid Aristoteles de loco Senserit*, and the other in French, the *Essai sur les données immédiates de la conscience*, this last well known as the first of the three books which constitute his main contribution to philosophical theory, entitled in the English edition *Time and Free-will*.

The authors have also reproduced for us in this account of Bergson's life and personality two other prize-distribution addresses, one spoken in 1885, on "La Politesse," which is a beautiful illustration of his power of subtle analysis and of the quiet humour which is characteristic even of his most difficult metaphysical work. The other is ten years later and entitled "Le Bon Sens et l'Éducation". In this the main theme is the contrast (also a main theme in *Matière et Mémoire*, published in the same year) between good sense, "the very essence of spirit," and the "dead weight of errors and prejudices we are condemned to carry along with us". "Education must step in, not so much to impart an impulse as to clear away hindrances; to raise a veil rather than to bring light."

In 1900, the year of the Universal Exhibition, the first International Congress of Philosophy was held in Paris. At the same time the *Société française de Philosophie* was formed. Bergson was associated with both of these movements, and many of his most valuable contributions to current philosophical controversy were called forth by the discussions at these gatherings. M. Bergson is now engaged in re-editing the principal articles he has contributed from time to time for a new volume of *Essays and Lectures*, but until this appears the articles are difficult to obtain, most of them being out of print, and the account of them which the authors of this volume have given us is therefore specially valuable.

The remainder of the book is an account of the philosophy. It is ranged under four heads, namely, Change, Freedom and the Will, Body and Soul, Life. The arrangement follows the order suggested by Bergson's three books. The chapter on "Body and Soul" contains under

the title "Intellection," a short account of one of Bergson's most important occasional articles, "L'effort Intellectuel," which appeared in the *Revue Philosophique* for January, 1902.

There is one disadvantage that Bergson's philosophy suffers from presentation in this condensed form, crystallised as it were round definite doctrines which are made to fit into one another or at least to lead one to another, it makes it appear much more systematic than it is. This is perhaps inevitable and only to be overcome by direct contact with the living thought itself. The unity of Bergson's philosophy is the indivisible flow of a movement, not the rigid consistency of a system.

H. WILSON CARR.

*The Ethical Implications of Bergson's Philosophy.* By UNA BERNARD SAIT, Ph.D. Archives of Philosophy, No. 4. New York: The Science Press, 1914. Pp. 183.

Mrs. Sait has already earned the gratitude of students by preparing the excellent bibliography of M. Bergson's writings and the ever-increasing mass of literature directly bearing upon them, published by the Columbia University Press. It is a bibliography conveniently arranged in a chronological order so that any collector can go on adding to the catalogue until the interest dies out or loses itself in the general stream of the world's thought. In the present work the author shows that she is no mere collector, but a profound student and assimilator of the new philosophy. Another teacher besides Bergson has also influenced her, Prof. Dewey, under whom she has studied, and to whose inspiration, as she gratefully acknowledges, the particular form of her ethical theory is due. In this most thorough and adequate study which she prepared and presented as her thesis for the doctorate which the University of Columbia has conferred upon her, she has endeavoured to expound the principles and definite doctrines of Bergson's philosophy and to indicate their special bearing in practice.

"On the subject of Ethics," she says, on page 67, "Bergson has so far, in his writings, had practically nothing to say." And she goes on to suggest that "Bergson cannot, at least initially, have been enthusiastically interested in ethics. His personal attitude throughout his writings seems to be a combination of that of the scientist and that of the artist, and, of course, this has had its effect on his philosophy." No doubt. But then if this be true of Bergson himself, his followers have not been slow to make practical application of his doctrines, witness Le Roy, Sorel, Wilbois, to name only a few of the best known. Indeed he has been claimed as the philosopher of revolution in religion and politics and morals. His doctrines have even been held by Sorel in his *Réflexions sur la Violence* to justify the advocacy of violent methods as opposed to peaceful persuasion for securing social progress. One of Bergson's hostile critics, René Berthelot, has tried to show that Bergson's doctrine is in substantial agreement with, if not inspired by, Nietzsche, and seeing that just now the aggressive militarism and materialism which is held to be responsible for the present calamitous war, is traced by many to the influence of Nietzsche, the question of the true ethical implication of Bergson's theories cannot be unimportant.

It is not, however, with this aspect of the ethical problem that Mrs. Sait has dealt. Her book was written before the terrible events of this war turned all thoughts to the question of strife and conflict and the part they play in the evolution of "culture". Whatever may be the ethical implication of Bergson's philosophy, no one is likely to charge it with

the attempt to justify the maxim that might is right. The ethical implications which the author treats in this book concern the individual and his relation to society. What she appears anxious to show is that Bergson's philosophy is consistent with all the old and generally approved moral ideals. She does not suggest that it implies other and altogether new ideals. She has therefore nothing startling for us. This may be disappointing but it is just as well. If new ideals are lying implicit in Bergson's philosophy it is to Bergson himself we shall look for their revelation. Two difficulties in particular seem to confront the author in her attempt to find on Bergson's principles an objective meaning of good and evil and consequently of right and wrong. The first is the denial of final end or purpose in the form of a pre-ordained plan to which the world conforms. Evolution is a process, the vital impulse is behind us, driving us forward in a need of creation. It is not an attractive force drawing us to fill our place in an already prepared city of God. Reality is making itself. The other difficulty is the doctrine of the tensional nature of experience. Activity is manifested in extension and extension is the inverse direction of the vital impulse itself. Hence in making itself life is also defeating itself. It is these principles, apparently at variance with our ordinary postulates of morality, which the author seeks to reconcile with the concept of an objective moral order and progress. How far she is successful the reader must judge.

One word of warning seems called for. The terms "sympathy" and "intuition" bear in Bergson's writings a definite and technical meaning. We cannot call to mind any passage in which they carry any ethical implication whatever, yet these terms are the keynote of Mrs. Sait's ethical interpretation. This is not an error into which Mrs. Sait has fallen, she is fully conscious that she is extending the meaning of the terms, and she tells us in her introduction that she considers that Bergson has not himself fathomed the depths of the conceptions for which these terms stand. It may be so, but we wish she had guarded more carefully against the danger of a complete misapprehension. When we read for example, on page 154, that "through growth of sympathy and recognition of unity, all should come to be animated with a common purpose, the welfare of the whole society," we may find no fault with the aspiration, but is it not clear that the term "sympathy" is used not in an extended but in a quite different meaning from that of Bergson? The behaviour of the paralysing wasp is an instance of what Bergson means by his doctrine that instinct is sympathy.

We may call particular attention to the author's views of the part which women are to play in the society of the future. She is under no illusion. "It is in man," she tells us, "that intellect has reached its fullest development." This she considers is not due to the incapacity of women. In the true Bergsonian spirit she conjectures that intellect slumbers in women ready to awaken when artificial restrictions are removed and freedom is attained. It may even be destined to surpass its achievements in man.

H. WILDON CARR.

*Religion and Free Will: A Contribution to the Philosophy of Values.* By W. BENETT. Oxford: Clarendon Press, 1913. Pp. 345. Price 7s. 6d. net.

The controlling interest of Mr. Benett's previous writings has been, as he himself puts it on page 62, the review of all kinds of judgments passed upon human conduct as determined by final ends. His conclusion

was that all such judgments are determined by the relation in which conduct stands to the final end of evolution. In the present massive and well-informed argument he advances to the study of religion as disclosing a final end which is neither properly conceivable nor subject to phenomenal law. He rejects the ethical mean as the test of goodness, mainly for the reason that evolution demands a conflict of opposites, and stops when either conflicting principle becomes weak. Unless the existence of absolute values is to be given up, "we must assume that there is some final end external to the process of evolution, and beyond the limits of our reason" (p. 33). The distinction he makes between ethics and religion is so extremely sharp as to constitute a dualism. We are not prepossessed in favour of having a black ugly ditch between the two, but for Mr. Bennett it could scarcely be more impassable. "In ethics," he says, "we deal with phenomenal facts and hypotheses: for conceptions of reality we must appeal to religion." The truth is surely rather that moral experience itself puts us in contact with a non-phenomenal reality which first lends meaning to the word "absolute". But Mr. Bennett's view of a transcendental order, revealed by religion, and forming a necessary complement to ethics, naturally gives shape to his whole argument; and alongside of it goes a dualism of religion and intelligence which is hardly less acute. "As a belief, in order to serve as the basis of worship, must be irrational," he declares, "so, in the same way, a belief once formed loses its vitality as soon as it is exposed to criticism and analysis" (p. 104). It might have been supposed that no belief is quite irrational whose irrationality you can prove to be necessary; but apart from this, it is only fair to say that for Mr. Bennett ethical belief is in the same condemnation, and that two pages later he proceeds to give grounds, which may be allogical enough but need not be irrational, for discriminating "the doctrinal absurdities which are worthy of belief, from those which are not". Religious beliefs are true, he holds, which are consonant with evolution. What this means is later explained by saying that religion, too, like the evolutionary process, must be a *complectio oppositorum*; thus there can be no permanent religion "without both the faith which is spiritual, and finds its expression in love, and the faith which is intellectual, and expresses itself in dogma" (p. 156). But religion should keep clear of contemporary philosophy. And to make a prophylactic barrier between itself and science, it must expel all mathematical ideas.

We have no space to consider Mr. Bennett's interesting chapters on Dogma and Asceticism, in the second of which he owes much to Harnack; but his treatment of Free Will and Determinism merits notice, and is perhaps of more distinctive philosophical importance than anything else in his book. He differentiates in a clear and sound fashion between the scientific and the teleological methods, the one dealing with external, the other with internal experience in certain aspects; and in consequence rejects the idea of a science of ethics as intrinsically absurd. It could only be realised, anyhow, on a basis of Hedonism. And free will cannot be real if Hedonism is right. He declines to inquire explicitly whether the will is free or not, but on page 267 he commences an investigation of what precisely is meant by "freedom of the will" that forms a quite useful substitute. It is argued at length that while no doubt a clear conception of evolution implies new departures, and this position may be used to discredit moral freedom as nothing more than a natural spontaneity, yet in the province of thought, unlike extension, freedom occupies the foremost place, almost to the exclusion of law. When Mr. Bennett comes finally to ask what the practical results would be of a universal acceptance of neces-

sitarianism, we are treated to the best writing and thinking he has yet given us, and this holds good particularly of his searching scrutiny of the meaning attached to expediency by Bentham and Humé. One striking circumstance is pointed out, namely, that "the beneficent reform [in criminal administration], for which Bentham deserves a large share of the credit, was in fact brought about by the substitution of the principle which he attacked, in place of the principle which he regarded as his own". His theory was expediency, but the great effects produced by his work had their sanction in justice. Reference must also be made to a convincing argument in favour of retributive justice as the one fixed standard by which all punishments should be determined.

It is curiously difficult to sum up the total effect of Mr. Benett's volume. Each paragraph, as it comes, appears to make its own contribution, and does make it; yet when we ask ourselves finally how much we have learnt, we are at a loss. The book would at least gain immensely by the insertion of a full table of contents. It closes, except for a valuable note on the misuse of terms, in a tone which is very characteristic. "The final stage of a nation, whose beliefs are based on a denial of free will, is a collection of individuals undistinguished from one another either by great virtues or great vices, but resembling one another in their respect for money, and well endowed with the instincts which lead to success in making it. A society so constituted would be incapable of further evolution."

H. R. MACKINTOSH.

*The Divine Right of Kings.* By JOHN NEVILLE FIGGIS. Second Edition, with Three Additional Essays. Cambridge University Press. Crown 8vo. Pp. xii, 406. 6s. net.

The second edition of Mr. Figgis's work is accompanied by three essays produced since 1896, the date of the first impression. One of these, on Erastus and Erastianism, was written in 1900, and according to the author "it shares with the main body of the book the defect of being written beneath the shadow of the Austinian idol". The objection of Erastus to the interfering "discipline" of the Church is well established, but it is curious to find him exalted as a hero of liberty (p. 332). His system, as the author repeatedly points out, is only applicable to a State wherein the sovereign and subjects alike profess the true religion (p. 322). But such a State, even if it existed, would hardly guarantee the rights of individuals; sins and crimes would be identified externally and the civil magistrate would deal with both (p. 334). In any other kind of State Erastus admitted that the right of "discipline" lay in the Church. If we let abstract theory go, and judge by practical effects—as Mr. Figgis is inclined to do in the case of the Anglican clergy under James II. (pp. 211, 282)—we are immediately overwhelmed in difficulties. Who shall judge of the "truth" of the sovereign's religion, and what is to happen in the obvious case when the subject does not agree with his sovereign's view? Erastus himself departed to another city, but to the normal subject this course might not be convenient.

There is, however, much valuable information in the essay, and its matter fully justifies its inclusion in the book, since Erastus's clear conception of sovereignty links him with the upholders of the divine right of kings. The chapter on "*Jus Divinum* in 1646," too, is germane to the main thesis, asserting as it does the fundamental resemblance between the theory of the High Church Party, and that of the Presbyterian zealots. Both sought to make the basis of the State something higher

than mere utility. A keener appreciation of the doctrine of the "two kingdoms" has made Mr. Figgis realise more clearly the value of the Presbyterian revolt against State authority, but he does not like the "eldership," which he regards as a domineering meddlesome force, lacking the dignity but not the stringency of the Roman system. He does not mention the fact, that since Presbyterianism could seldom rely on the sword ("purged" armies were notoriously unsuccessful) its authority must have rested in some measure upon popular consent, and since the "eldership" was elective it is scarcely just to regard the system as a narrow oligarchy.

The essay on "Bartolus and the Development of European Political Ideas" is valuable and contains much information hard to obtain elsewhere, but it appears to be somewhat alien from the main body of the book. To Bartolus "the law was not so much a pursuit as a passion" (p. 349); to the doctors of the Divine Right School, it was secondary to the personality of the sovereign (p. 255), who was beyond the trammels of law altogether (p. 234).

On the whole the new edition of Mr. Figgis's book marks a modification of the writer's views on the divine right of kings; it remains none the less an exposition of the Austinian position. Sovereignty must be a clear-cut, definite thing. It is true that if two forces of equal magnitude act directly counter one to another, no operative force will emerge—merely a state of strain. In any other case may be produced a "resultant" force which will act freely along its own line. Is not "sovereignty" the "resultant" of a whole complex of forces?

J. D. MACKIE.

*Philosophy: What Is It?* By F. B. JEVONS, Litt.D., Professor of Philosophy in the University of Durham. Cambridge University Press, 1914.

This little book consists of five lectures delivered to one of the branches of the Workers' Educational Association. It is therefore addressed in the first place to those who are engaged in practical pursuits and who have not the time, if they have the inclination, to indulge in that serious study of the problem of knowledge and existence which is the business of the philosopher. Philosophy, in Dr. Jevons's view, comes at times to most, if not to all, men. It comes as a challenge—What does it all mean? What is the good of it all? And so far as a man accepts the challenge, and seriously reflects, and tries to find an answer, he is a philosopher. Personally of course any one may fall back on religious faith, or even on robust health, and satisfy himself that there must be both meaning and value in existence, but if he is really interested in his questions he will not be satisfied till he has understood and answered possible doubts. The purpose of the author is, therefore, to guide the inquirer through what we may perhaps be allowed to call the classical doubts which beset the philosopher and to indicate briefly but surely the path of safe conduct through them.

The first lecture deals with the distinction between philosophy and science. The sciences deal with particular sets of things, philosophy is concerned with the whole. And the demand of our rational nature that the whole shall be good, and that this good of the whole shall be distinct from, and more than, all particular goods, is in the final chapter shown to be the ground of the concept of God, which in Dr. Jevons's view, is the final reconciliation. But to reach this end of philosophy we



have to combat various forms of doubt due to the partial views of experience which obscure its final purpose. The intermediate chapters deal with materialism and idealism and scepticism, and with practical problems such as that of freewill and determinism. Dr. Jevons illustrates the problem of reality by the figure of a curve, on the outer side of which is the external physical universe, consisting, so it seems, of matter in motion, and on the inner side is the mind, consisting of our thoughts, feelings and desires. The materialist affirms that the outer side of the curve alone is real. The idealist denies the independent reality of this outer world and affirms reality in the full sense to that alone which lies within the curve. The sceptic can find no ground for either belief. The answer to the sceptic is that even he must affirm reality, for otherwise even scepticism is groundless. Dr. Jevons has certainly succeeded in packing an extraordinary amount of sound suggestive argument into an excellent, small manual.

H. W. C.

*The Applications of Logic: A Text-book for College Students.* By A. T. ROBINSON, A.B. Longmans. 4s. 6d.

The purpose of this book is "to treat the whole subject of logic in so far as it bears on the practical work of thinking and of expressing thought; it is intended as a text-book of applied logic, suitable for use as an introduction to the subject with college classes". The exercises aim at cultivating both expression and the critical faculty. The author says: "It would be surprising and disconcerting if this book were found to contain any original thought, but I am not aware that the ideas in it have been anywhere put to quite the same use before". Part I. deals with the Order of Statements; Part II. with the Meaning of Statements; Part III. with the Verification and Proof of Statements. The conclusion, entitled *The Point of View*, contains much practical wisdom. "Study the opposite." "If you are rich learn of the poor. Find the man who stands at the other end of the diameter and make him your schoolmaster."

ARTHUR ROBINSON.

*A New Philosophy: Henri Bergson.* By EDOUARD LE ROY. Translated from the French by VINCENT BENSON, M.A. Williams & Norgate. 5s. net.

English readers will be grateful to Mr. Benson for rendering this book accessible to them. The first part is a reprint of two articles published in the *Revue des Deux Mondes* in 1912, and entitled "Une Philosophie Nouvelle," and containing a general view of Bergson's method and teaching. The second part, under the title of "Additional Explanations," discusses the theory of immediacy, perception, etc. The conclusion contains some interesting remarks on the alleged incompatibility between Bergson's philosophy and the point of view of ethics and religion; this incompatibility, of course, M. Le Roy denies.

ARTHUR ROBINSON.

*Un Romantisme utilitaire. Étude sur le mouvement pragmatiste.* Par RENÉ BERTHELOT. *Le Pragmatisme chez Bergson.* F. Alcan. Pp. 358. 7 fr. 50.

In the first volume of his work M. Berthelot dealt with the Pragmatism of Nietzsche and Poincaré, in the second he passes to the Pragmatism of



Bergson. The first chapter sets out the pragmatist elements in *Les données immédiates* and in *Matière et Mémoire*. Bergson has never employed the word "pragmatism" to designate his doctrine, but in his works we find a partial pragmatism, limited to intellectual knowledge, but not extending to knowledge by intuition. In his first book Bergson finds that psychical processes are misrepresented by the application to them of forms of thought moulded on the material world and adopted for their practical utility; in *Matière et Mémoire*, perception, memory and intellect are each and all held to be determined in their nature by practical needs. M. Berthelot devotes his second and third chapters to tracing the pragmatist element in *L'Évolution Créatrice*, and his fourth to a comparison of the pragmatism of Poincaré, Nietzsche and Bergson. Nietzsche differs from Bergson by his radical determinism.

The sources of Bergson's pragmatism are found in Ravaisson (doctrine of habit) and in Schelling (intuition which does not sacrifice science) (chap. v.); his views on instinct, life, and contingency are traced directly to Shaftesbury and Hutcheson, and indirectly to nearly every philosopher on record (chap. vi.). Chapter vii. brings this historical investigation to a close with an inquiry as to the influence of Spencer on Bergson. The conclusion is that the characteristic doctrine of Bergson is *durée réelle*. "C'est en fin la notion de cette durée qui donne sa signification spéciale à l'opposition établie par lui entre l'intuition et l'intelligence, c'est-à-dire à ce qu'il y a de plus caractéristique dans son pragmatisme." One may be permitted to doubt whether much is gained in reaching this conclusion by way of Heraclitus, Plotinus and the rest. The remainder of M. Berthelot's book is occupied with a detailed criticism of Bergson's views on mathematics, logic, physics, biology and psychology. Most of these views are held to be either not new or not true, or both old and untrue, except the doctrine of "real duration". "Je crois cependant qu'il y a une idée foncièrement nouvelle dans sa doctrine. . . . Il paraît vrai de dire qu'il existe ce qu'on peut appeler un temps psychologique ou un temps sensible, différent du temps mathématique" (p. 350). Of this conception M. Berthelot thinks something may be made when corrected and interpreted by a rational idealism. But he thinks Bergson has made an ambiguous use of the notion of immediacy, and has failed to establish the possibility of an intuition quite cleared of the work of intelligence.

It is to be regretted that M. Berthelot permitted himself to class Berkeley and Bergson among "les petits maîtres de la philosophie". Every condemnation of this sort certainly condemns somebody. But who is condemned here? Berkeley and Bergson—or M. Berthelot?

ARTHUR ROBINSON.

*Die Ästhetische Struktur des Bewusstseins. Grundlegung einer Theorie der Weltanschauungsformen.* Von Dr. PAUL HOFMANN, Privatdocent an der Universität Berlin. Berlin: Georg Reimer. Pp. xviii, 421. M. 8.

This ingenious study, dedicated to Benno Erdmann, is mainly concerned with the conditions of the possibility of consciousness. Any consciousness, we can say at the outset, must be the unity of a manifold; and the unity must be such as to give the manifold at least some of its determinateness. Dr. Hofmann goes further than this. The unity must somehow be a scheme which gives each member of the manifold its own relative self-existence, and at the same time relates it to the rest of the manifold. From this the consequence is drawn, in my opinion, wrongly, that the members of the manifold, whatever other characters they may possess,

must have each a determinate 'position' in one or more 'forms of order'. Position in such a form of order gives the manifold sufficient unity to make consciousness at its lowest level possible. When the writer comes to deal with our actual empirical consciousness, he shows space and time to be such forms of order, and the rest of his discussion makes it clear that he regards space and time as essential to our consciousness of anything whatever. This means, unless I have misunderstood him, that he would reject the suggestion that it is possible for our consciousness to deal with anything into which space and time do not enter as relevant elements. I do not agree with this. In Arithmetic, and indeed in all the formal sciences, you seem to have a unity where the various parts are definite, and definitely separated off from one another, not by any relation to time or space, but by their relation to the science as a whole. This latter relation does not constitute a "form of order" in Dr. Hofmann's sense. While I should insist that experience is throughout continuous with experience in time and space, I should be inclined to deny that space and time are necessary conditions of all experience, in Dr. Hofmann's sense.

If, however, we admit Dr. Hofmann's account of the general nature of the unity involved in consciousness, then it is clear that these conditions would so far be satisfied, as the author suggests, in an experience whose only form of unity was space alone or time alone. That is to say, an experience which held various sense-data—touches, sounds, etc.—together by means of space, or one which held them together by means of time (without any categories whatever) would provide a unity sufficient to satisfy Dr. Hofmann's conditions. Thus, if our experience had possessed only one of these forms, there would be, it seems, no need for any further development. But the whole trouble arises for us, because we have the two forms. For the unity which we have when we confine ourselves to either form breaks into bare multiplicity as soon as we try to bring in the other form. The difficulty of bringing these two forms to the unity demanded by consciousness provides the thesis of this book.

The predominance which one or other of these forms tends to assume over the other comes out clearly directly we examine our experience on the purely perceptive level. This experience may easily be regarded as an objective unity if we consider merely what there is in space at any given moment of time; but then there is no way of connecting the various cross-sections at successive moments. It is a unity if we take what happens in time at any given point of space, but then there is no way of connecting the various temporal cross-sections at different points of space. Thus from the first point of view we have to regard any temporal connexions, from the second point of view any spatial connexions, as purely subjective. Is it possible to take up a point of view from which both space and time are objective? It is, replies Dr. Hofmann, but to do it consistently will take us very far beyond perception. For the general difficulty is this: If the space unity is objective, the time unity is subjective; and thus time is "in" the I, which is itself "in" space. If the time unity is objective, the space unity is subjective; and here space is in the I, which is itself in time. But if we endeavour to regard both as objective, we have to reconcile all these characteristics; space and time must each be capable of being regarded as both subjective and objective, and the I, as at once a single object in space and time, and as having space and time in it. In this way Dr. Hofmann leads us to what for Kantians may be regarded as the problem of problems.

The justification for this particular mode of approach is found in the light it throws on the various erroneous philosophies, which are shown to lay undue stress either on the spatial point of view or on the temporal.

Truth for Dr. Hofmann lies in reconciling both these points of view, and in accepting whatever is necessary to do this. Each of these aspects is shown to be a partial description of actual experience on the lowest level, which consists of a self which is in both time and space as a given among other givens, and relatively to which, as the "here-now," all other givens are ordered. Such an empirically given self he calls the "objective-subject". The here-now of the self is thus the point round which everything in the experience of the self is arranged. On this level, then, experience would consist of a given multiplicity (not merely subjective), brought together into the space-time unity of the self. As unifying givens in different times, the self would be describable as a substance. There would be no other substance.

Although such an experience is, as Dr. Hofmann says, unbegreifbar, rätselhaft, yet it contains all that is necessary. Our inquiry, then, as to the conditions of the possibility of an experience which contains both time and space as objective, stops at this point. The categories and principles which are found in developed experience are not necessary for consciousness; they only become necessary when we endeavour to obviate the difficulties to which the elementary experience gives rise. The process is discussed by Dr. Hofmann at length.

I have indicated briefly what I take to be the fundamental point of view of the book, omitting much that is necessary to the proper understanding of its main position. The book is dominated throughout by the antithesis between the spatial and the temporal points of view, with the result that the reader is left with the feeling of a lack of true perspective. This feeling is increased by the subjective turn which is given to many of the discussions. The investigation into the conditions of the possibility of consciousness (if such an investigation is possible at all) is beset with many pitfalls, which Dr. Hofmann has not always succeeded in avoiding.

The format of the book is excellent. The book is written in clear and simple German, and is supplied with a very full and adequate analytical summary in addition to the index.

L. J. RUSSELL.

*Rudolf Eucken: His Philosophy and Influence.* By MEYRICK BOOTH, B.Sc., Ph.D. (Jena). London: T. Fischer Unwin, 1913. Pp. xxviii, 207. Price 3s. 6d. net.

This little book begins by making rather a bad impression, but it captures the reader's interest, and ends by deserving a distinctly favourable judgment. The bad start is almost wholly due to the 'Introductory Historical Sketch' (pp. xi-xxviii), the purpose of which is to trace the treatment of the relation of Nature and Spirit in the history of philosophy down to Eucken. It is a 'sketch' in the worst sense, being both thin and inaccurate. *E.g.*, Protagoras is classed with Democritus as giving 'to the Ionian philosophy a thoroughly materialistic turn' (p. xiv); the main impression left of Aristotle is his alleged 'devotion to the world of external reality' (p. xvii), with not a word about θεωρία or νόησις νοήσεως; and Kant is said to have held that 'reason was concerned with the natural world only' (p. xxv). Where, one wonders, has Mr. Booth collected these astonishing views? Seeing that he professedly writes for 'those who have made no special study of philosophy or theology' (Preface), this sketch comes near being mischievous.

But once we are past this unfortunate introduction, the book improves rapidly. The first chapter is mainly biographical; the next four give a

clear and straightforward statement of the main points of Eucken's philosophy, which in an admirably brief and lucid summary on page 52 are given as follows: '(1) The break with the merely natural life; the negation without which there can be no spiritual experience. (2) The recognition of an independent but indwelling spiritual life; the new birth which is the beginning of all positive religion and morality. (3) The free, active and personal appropriation of the spiritual life. (4) The organisation of human life and civilisation in the interests of the spiritual life and subject to its norms: *The overcoming of the antithesis between spirit and nature.*' Incidentally, the opposition of Eucken's 'Activism' to Naturalism, Intellectualism, Voluntarism, Pragmatism is duly explained; also the emphasis on concrete life-movements as against abstract thought-processes; and the nature of truth as 'a spiritual creation, an advance, a self-formation of life as a whole' (p. 35).

The bulk of the book (chaps. vi.-xii., pp. 53-204) is occupied with applications of Eucken's principles to some of the central problems of modern life. These, slight though they are, are by far the most interesting chapters. Of course, the topics dealt with, Civilisation, Socialism, Education, Religion, covering in detail such questions as the dwindling birth-rate and eugenics, the spiritual effects of the introduction of machinery, the over-pressure of modern life, the practicability of the Socialistic state, poverty, the women's movement, the control of education by a secular state, present-day tendencies in education, the place of Christianity and Christian Churches in the modern world—all these, and many more, are intrinsically of supreme interest. But there is an interest beyond these. That Eucken would always appeal to the temper of the moral reformer was, of course, clear. But we must be grateful to Mr. Booth for having here shown us strikingly, in his own person, how a man keenly alive to many of the mistakes, abuses, and evils of modern civilisation draws his inspiration from Eucken's philosophy—applies it and finds it work. I note, amongst other things, *a propos* of an argument about the dependence of spiritual movements on population, a curious calculation (pp. 103, 104) according to which, owing to limitation of child births, the Protestant Middle Classes in England may practically die out in four to five generations, whereas in the same time the corresponding Roman Catholic population, reproducing itself without limitation, will treble. On page 151, Mr. Booth is, of course, quite sound in his apparent paradox that many a modern socialist is 'at heart a pure individualist'. It is rather more far-fetched to interpret the existing examination system, and the preference for office over agricultural work, as both symptoms of the vice of Intellectualism in modern life (p. 85). That Eucken has always championed the cause of the lesser nationalities, and in particular has written stirring appeals on behalf of Finland (p. 144), is certainly a fact worth remembering in view of his participation in a more recent manifesto.

But what, after all, is it in Eucken's philosophy that makes it the inspiration of life to the author? Is it anything that will give more precision and substance to what Dr. Bosanquet has called Eucken's 'deluge of ethico-religious rhetoric' (*Quarterly Review*, April, 1914)? The answer, as far as I can see, must be 'No'. What appeals to Mr. Booth, because it voices the temper in which he approaches life, is the vindication of the reality of the spiritual life in which man is rooted, the moral combat needed to realise this life inwardly in oneself, the reformer's zeal and hope of a 'reconstruction of our entire life and civilisation upon a positive spiritual basis'. The attraction lies in the demand for a 'self-renewal,' a 'heightening' of life, a 'rebirth' as in religious conversion; and in the forward-looking attitude towards a betterment of the world

('progress') by human activity. But however much one may sympathise with this attitude—and who would not?—two questions find no answer. In the first place, Mr. Booth brings us no nearer to giving Eucken's 'spiritual life' a positive content, something definite to grasp. This is true of the past: Eucken's analysis of historical 'syntagmata' moves wholly in generalities. It is no less true for the future, if we ask for definite guidance as to the lines of reform. *E.g.*, in his book, *Can We Still Remain Christians?* Eucken demands a far-reaching modernisation of Christian dogma, but his positive hints as to the character of this reconstruction are singularly scanty and vague. To Mr. Booth the 'spiritual life' is full of meaning, I should guess, because he identifies it with the teaching of Protestant Christianity. As for the rest, his criticisms of social abuses and dangers can, of course, be largely supported by quotations from Eucken, because Eucken's statements are so conveniently general, but much the same ideas have been voiced by many others who have never heard of Eucken at all. Eucken encourages reformers to reform, but he gives them next to no positive directions. His call to effort and action is stimulating, but he does not tell us, except in vague adumbrations, what this spiritual life is of which we must possess ourselves. He points out the promised land from afar. He does not lead us there.

And in the second place, Mr. Booth neglects the speculative difficulties of Eucken's position altogether—especially the contradiction between the conception of progress by moral effort and that of a spiritual reality which is eternal and exempt from change. Granted that man is both *in time* and *beyond it*, and that the Eternal manifests itself in his life as a struggle from lower to higher, surely we cannot attribute any 'advance' to the Spiritual Reality *quâ* eternal? Past and future, progress and betterment, are relative to human life in its moral aspect: it is surely meaningless to make them features of the Absolute—even though we call it God.

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- Emanuel Lasker, *Das Begreifen der Welt*, Berlin, Hans Joseph, 1913, pp. 491.
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- Franz Boll, *Aus der Offenbarung Johannis, Hellenistische Studien zum Weltbild der Apokalypse*, Leipzig und Berlin, Teubner, 1914, pp. viii, 151.
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## VIII.—PHILOSOPHICAL PERIODICALS.

**PHILOSOPHICAL REVIEW.** Vol. xxiii., No. 5. **H. R. Marshall.** 'Responsibility.' [If a man is what he now is in virtue of his whole past, there is no such thing as irresponsibility. This view clears the way for a treatment of accountability, crime, punishment.] **W. Fite.** 'Pragmatism and Truth,' II.—[If the facts of science are responses, the expression of underlying motives, then, while they remain independent, we may come to agreement with them, just as we come to agreement with independent fellow-men.] **G. W. Cunningham.** 'Bergson's Conception of Duration.' [Bergson admits the anticipatory aspect of consciousness which, if supplied, changes duration from a heterogeneity to the elaboration of a growing and ripening homogeneity.] **N. Wilde.** 'The Pragmatism of Pascal.' [Pascal finds rationalism insufficient, relies on experience, recognises active factors in belief, emphasises custom, appeals to religious experience as the source of religious truth.] **Reviews of Books.** **Notices of New Books.** **Summaries of Articles.** **Notes.**

**PSYCHOLOGICAL REVIEW.** Vol. xxi., No. 5. **S. W. Fernberger.** 'On the Elimination of the Two Extreme Intensities of the Comparison Stimuli in the Method of Constant Stimuli.' [The two extremes of the seven may be eliminated without marked change of the measure of sensitivity or the point of subjective equality. Subjective attitude influences the interval of uncertainty.] **R. A. Cummins.** 'A Study of the Effect of Basket Ball Practice on Motor Reaction, Attention and Suggestibility.' [The game favours concentration and suggestibility, but breaks up control of motor reaction.] **J. Weidensall.** 'Psychological Tests as Applied to the Criminal Women.' [Forty per cent. of the records probably resemble those of working women; both classes stand below the college girl.] **M. F. Washburn.** 'The Function of Incipient Motor Processes.' [Argues that the initiation of a specific motor response, with attention to a given stimulus, induces activity in sensory centres most directly connected with that response through the previous occurrence of their own response together with it, and that this activity is accompanied by images.] **Discussion.** **G. v. N. Dearborn.** 'The Inhibitory Factor in Voluntary Movement.' [Critique of Langfeld; we must not ignore the inhibitory kinæsthetic nature of the cortex.]

**JOURNAL OF PHILOSOPHY, PSYCHOLOGY AND SCIENTIFIC METHODS.** xi., 7. **A. R. Schweitzer.** 'Some Critical Remarks on Analytical Realism.' [A criticism by a pragmatist mathematician of Russell and E. G. Spaulding's essay on analysis in *The New Realism*. Charges Spaulding with not discriminating "the conceptual constructive systems from the crude percepts which led to them" in the case of space, continuity, time and motion. Charges Russell with a bias in favour of asymmetrical relations which is not mathematically justifiable, and both with arbitrariness and uncertainty in their accounts of relations.] **T. S. Moore.** 'Value in Relation to Meaning and Purpose.' [Meaning being



the genus, divided into the species logical or cognitive and affective-conative meaning, purpose and value are subspecies, conative and affective.]—xi., 8. **W. H. Sheldon.** 'A Definition of Causation.—I.' [Ignoring Hume, the author proposes to study causation by "ascertaining the logical structure of the typical events" in Mechanics, the Properties of Matter and Electricity.] **M. R. Cohen.** 'Rule v. Discretion.' [It is a form of the issue 'rationalism v. empiricism'.] **I. Babbitt.** 'The Modern Spirit and Dr. Spingarn.' [A reply to a review in x., 25.]—xi., 9. **H. C. Brown.** 'The Work of Henri Poincaré.' [A useful appreciation and summary.] **A. Balz.** 'Music and Emotion.' ["There is a general analogy between the sounds which call up a certain type of emotion and the tendencies in the vocal sounds that commonly occur in the expression of that same emotion."] **J. S. Moore.** 'The System of Transcendental Values.' ["The final step in the interpretation of the physical, mental and social consists in their correlation and unification as still partial expressions of an Absolute Being."]—xi., 14. **W. H. Sheldon.** 'A Definition of Causation.—iv.' [Examines 'causation in the field of electricity,' and sums up. His 'answer to Hume' is that given two terms in a certain relation, "the rest of necessity and by pure deduction follows". Hume's mistake was to try to derive necessity from one term, and the meaning of causation is "two facts or events such that one precedes the other, temporally or logically, and the second is defined by the first, i.e., the same as the first; a second case of it with added differences".] **W. C. Gore.** 'Externality and Inhibition.' [The truth in the neo-realistic contention that objects are not affected by being known, is that inhibition is an essential aspect in knowing. But the arrest is only temporary, and leads to further development.] **W. T. Bush.** 'Concepts and Existence: A Reply to Prof. Pitkin.' **W. B. Pitkin.** 'Rejoinder to Prof. Bush.' [(Cf. xi. 5, x. 25.) Bush wants to know how, if mathematical entities are regarded by realists as non-existent, they can also imagine they can see straight lines, etc. Pitkin replies that the difficulty had not occurred to him, and admits that the geometrical properties are not all perceived; but they are 'present' in the real complexes. He does not appear to be aware that he is merely reverting to Plato's *παρρησία* metaphor to express the connexion between universals and particulars.]—xi., 15. **A. W. Moore.** 'Isolated Knowledge' [An acute and detailed criticism of Russell's *Problems of Philosophy*, which attacks especially the failure to explain the 'sharing' of Platonic universals and the possibility of error.] **H. L. Hollingworth.** 'Report on New York Branch of the American Psychological Association.'—xi., 16. **A. O. Lovejoy.** 'Relativity, Reality and Contradiction.' [Criticism of M. R. Cohen's attempt (cf. x., 2) to get over the difficulty that for realism "all perceptual experience, hallucinatory or otherwise, is equally objective," by conceiving every quality as relative to a system, and so as not really contradicting any qualities extrinsic to that system. In one sense of 'relativity' however "his disproof of the subjectivity of the secondary qualities amounts to a proof of the subjectivity of all qualities: in the other it fails to abolish the distinction between subjective and objective qualities. For the former would then be qualities which are functions of the object's relations to diverse precipients. Even if the 'contradictory qualities' be taken as subsisting between the objects themselves no tenable sense can be given to the doctrine, and a cleavage among neo-realists is in consequence appearing."] **G. A. Tawney.** 'Transcendentalism and the Externality of Relations.' [A criticism of Russell which "finds in his theory of knowledge the same shadowy ambiguity as to the terms entering into relations that one finds in the philosophy of Green".] **G. A. Feingold.** 'The Fitness of the Environment for the Continuity of

Consciousness.' [Experiments (with picture cards) to determine the optimum mixture of homogeneity and heterogeneity for the best mental life. The ratio found was 30 : 70.]

ARCHIVES DE PSYCHOLOGIE. Tome xiv., No. 3. **J. Kollarits.** 'Observations de psychologie quotidienne.' [(1) The visual images aroused by thought of unknown persons and places depend on style, views, nationality, associations of names, etc. (2) Certain automatic or awkward movements may be due to other than Freudian factors.] **J. Kollarits.** 'Contributions à l'étude des rêves.' [There are pure fear-dreams, as well as Freud's wish-dreams. Freud's sexual symbolism is not universal.] **R. de Saussure.** 'Le temps en général et le temps bergsonien en particulier.' [The subjective is quality, the objective quantity; time may be regarded under either aspect. Real quantities (time, force, space,—which appear in that order) are continuous; intellectual quantity or number is discontinuous.] *Recueil des faits: documents et discussions.* **C. Werner, R. de Saussure.** 'IX<sup>e</sup> Réunion des philosophes de la suisse romande.' [Discussion of preceding paper.] **E. Cramausel.** 'Intelligence d'un lapin?' [Protection of a burrow against rain.] **E. Claparède.** 'De la représentation des personnes inconnues, et des lapsus linguæ.' [Rôle of suggestiveness of names, coloured hearing, casual association.] Notes diverses.

REVUE DE MÉTAPHYSIQUE ET DE MORALE. Mai, 1914. **D. Rouston.** 'La Morale de Rauh.' [Rauh desired an experimental ethics. So far he agreed with the sociologists, but he refused to recognise actual prevalence in society as the sole test of a moral opinion. It is no objection to the experimental method that moral hypotheses are not verifiable by *sensible* experience, for there are orders of reality (e.g. pure mathematics) that have to be otherwise cognised. A moral hypothesis is tested by opposing it in thought to varied conditions and seeing if we still accept it. Rauh's epistemology approaches that of the Chicago School, but he is clearer as to what is meant by the relative independence of reality, and is not tempted to take momentary success as an ethical criterion.] **M. Caullery.** 'La Nature des Lois biologiques.' [Rejects vitalism as needless and discusses a number of cases where it seemed plausible and was found on further investigation to be unnecessary. The only serious difficulty at present for a purely mechanistic theory is the origin of living matter; and it were rash to consider this permanently insoluble.] **É. Bréhier.** 'Philosophie et Mythe.' [All philosophies that wish to leave room for human action contain a mythology (defined as an ideal history of the past and future of the individual or race). The three main myths have been those of a plurality of lives, of salvation by grace, and of a future social Utopia attainable by human effort. Myths, though introduced for the sake of action, impede it if taken too concretely. The man of action merely uses an abstract schema of myth to direct his course.] **E. Laskine.** 'Les Transformations du Droit au XIX<sup>e</sup> Siècle' (concluded). [The notion of legal responsibility for damage has been greatly widened. In employer's liability for accidents to their employees and to others the notion of culpability tends to be replaced by that of a risk normal to the industry which must be borne by the *entrepreneur*. This principle is less clear in damages due to public works. The complete substitution of risk for culpability would be morally retrograde and socially dangerous. We must not exaggerate the gradual limitation of the rights of individual ownership as against the public. Many communal rights in agricultural land have been abolished and new forms of private property (e.g. copyrights and patents) have been evolved. It is impossible to find any one

general trend in modern legislation.] **Ch. Dunan.** 'Le droit de l'Électeur.' [The rights of citizens demand that all should have representatives and not merely those whose views are in a majority. The rights of the State demand that votes shall be weighed as well as counted. The former can be met by Proportional Representation; no satisfactory way of meeting the latter has yet been offered.] New Books. Reviews and Periodicals. July, 1914. **G. Belot.** 'La Valeur morale de la Science.' [A conflict is possible between the scientific ideal of truth at all costs, and social ideals to which some truths may be dangerous. Science may depend for its existence on society, but scientific truth is not identical with what prevails in a society and may conflict with it. The conflict cannot be solved by suppressing science as antisocial, for society would lose materially and morally by the suppression of science. The only possible reconciliation is to replace in society the bonds of tradition by those of reason; and how far this can be done remains to be seen.] **É. Gilson.** 'L'Innéisme cartésien et la Théologie.' [St. Thomas held that there could be no *a priori* proof of God's existence because the necessary connexion of the human mind with a body prevents its having an innate idea of God, though it has innate capacities for knowledge about him. Descartes' sharp separation of body and mind forced him to reject St. Thomas's *phantasmata* and to find some new theory of knowledge that should allow an *a priori* proof of God's existence. In spite of St. Thomas the doctrine of innate ideas had always had some credit among the orthodox. Descartes would have met with something approaching it in Suarez, and it was definitely revived at his time by Mersenne and others of his orthodox friends as a defence against a growing atheism.] **G. Dwelshauvers.** 'Du Sentiment religieux dans ses Rapports avec l'Art.' [Only a certain class of works of art produces an emotion closely connected with that of religion. These need not have religious subjects, but must reveal directly the inner harmony of the universe as it is felt by religious persons. Such works make an eternal appeal.] **G. Aillet.** 'La Coutume ouvrière d'après M. M. Leroy.' [Leroy's book tries to show the connexion between modern Syndicalist ideas and those of other times and classes. He tries to avoid external criticism and to give a perfectly objective account of the system of rights and duties which has grown up within French trades unions. Some of these may shock the middle classes, but they will be found when studied to possess a certain internal consistency and to present analogies to some modern developments of State law.] **G. Simeon.** 'Le Sentiment patriotique.' [The object of this sentiment is not directly one's race or native soil, but the State institutions which one holds to be realised or realisable within the boundaries of one's country and not realisable if those boundaries be seriously invaded. Thus equally patriotic people are fighting side by side for different and incompatible ends, but the maintenance of the national territory intact, being a necessary means to all their ends, provides the fictitious appearance of a single object.] New books. Reviews and Periodicals.

ZEITSCHRIFT FÜR PSYCHOLOGIE. Bd. lxx., Heft 5 und 6. **A. Gelb** und **H. C. Warren.** 'Bibliographie der deutschen und ausländischen Literatur des Jahres 1913 über Psychologie, ihre Hilfswissenschaften und Grenzgebiete' [2,740 titles, as in the corresponding *Index*; 1912 had 3,229].—Bd. lxx., Heft 1 und 2. **K. Reichardt.** 'Über den Vergleich erinnelter Objekte, insbesondere hinsichtlich ihrer Grösse.' [Experiments with coloured rectangles. Besides the numerical results, the author gives details regarding the images, the processes of impression and comparison, etc. Judgment may be based, according to direction of attention, upon

area or upon form.] **L. Edinger.** 'Zur Methodik in der Tierpsychologie: i. Der Hund H.' [It is important in animal psychology, as it is in psychiatry, that the history and *status præsens* of the individual under observation be known. Characterisation of a collie bitch.] **A. Aall.** 'Der Traum: Versuch einer theoretischen Erklärung auf Grundlage von psychologischen Beobachtungen.' [The dream-consciousness gains by the absence of sensory distraction, loses by the lack of sensory support; hence the disturbance of time, space, self, judgment,—though the dream is not illogical; hence also the affective, imaginative, symbolic character of the dream. Comparison of dream with fairy tale.]

ARCHIV F. D. GESAMTE PSYCHOLOGIE. Bd. xxxii., Heft 3 und 4. **E. Wentscher.** 'Die Aussenwelts- und das Ich-Problem bei John Stuart Mill: eine Studie zur Assoziationspsychologie.' [Mill was true to his method in his treatment of the problem of an external world; but his self-psychology results in a persistent, self-identical subject gifted with memory.] **P. Schwitz.** 'Das Müller-Lyversche Paradoxon in der Hypnose.' [Experiments with suggestion show that the illusion is a matter of bare perception.] **V. Benussi.** 'Gesetze der inadäquaten Gestaltauffassung; die Ergebnisse meiner bisherigen experimentellen Arbeiten zur Analyse der sogen., geometrisch-optischen Täuschungen (Vorstellungen ausser-sinnlichen Provenienz).' [Condensed report of the author's researches since 1902.] **A. B. Fitt.** 'Grössenauffassung durch das Auge und den ruhenden Tastsinn.' [Where the space-limen is of a certain magnitude, cutaneous distances are rightly estimated; where it is larger, they are underestimated; where it is smaller, overestimated.] **F. M. Urban.** 'Über einige Formeln zur Behandlung psychophysischer Resultate.' [Wirth's formulas are useful, but other constants are required.] **S. von Maday.** 'Begriffsbildung und Denken beim Menschen und beim Pferde.' [Allows the horse germinal concepts (*anschauliche Sachvorstellungen*) and germinal thought, or an activity of imagination operating by trial and error.] **W. Poppelreuter.** 'Bemerkung zu dem Aufsatz von G. Frings "Über den Einfluss der Komplexbildung auf die effektuelle und generative Hemmung".' Literaturbericht. [Tichy on Krejci's *Psychologie*.] Bd. xxxiii., Heft 1 und 2. **M. Scheinermann.** 'Das unmittelbare Behalten im unermüdeten und ermüdeten Zustände unter besonderer Berücksichtigung der Aufmerksamkeitsprozesse.' [Experiments upon immediate memory for letter-series (visual and auditory presentation) in fatigued (natural and induced) and fresh states. The quantitative results are supplemented by notes on feeling, attention, ideational type, etc.] **W. Freytag.** 'Bemerkungen zu Leibnizens Erkenntnistheorie im Anschluss an Couturats Werk *La logique de Leibnitz d'après des documents inédits* (Paris, 1901).' **J. K. Kreibitz.** 'Beiträge zur Psychologie und Logik der Frage.' [General characterisation of the question; species and particularities; the views of earlier writers. Psychologically, we begin with an historically conditioned conscious attitude (the *nativum*); a supervening perception or idea leads to an inhibition of the course of ideas, with unpleasantness and an act of 'will to know' (the *rogativum*); finally there is pleasant resolution (the *responsivum*).] **E. Hurwicz.** 'Der psychophysische Parallelismus und die Assoziation verwandter Gefühle.' [The reinforcement or pathological arousal of emotion by its physiological (expressive) factor imperils the doctrine of parallelism.] **R. Beck.** 'Studien und Beobachtungen über den psychologischen Einfluss der Gefahr.' [Dangerous exercises are recuperative because they demand concentration of attention and thus divert the mind from care or routine.] 'Akademische Preisaufgabe für 1917 aus dem Gebiete der Philosophie.' Literaturbericht. [Botti

on Gemelli's *Metodo degli equivalenti*.] Referate. **A. Kronfeld.** 'Zur Abwehr.' [Against Kastil.]

"SCIENTIA." RIVISTA DI SCIENZA. Vol. xiv., No. 2, September, 1913. **A. Mieli.** 'Le teoria delle sostanze nei presocratici greci. I<sup>a</sup> Parte: Dalle prime speculazioni fino ad Empedocle.' [Short examination of the theories held in Pre-Socratic times to explain the continual transformations of the various substances in nature. Many of the opinions will be discussed in a book shortly to be published by the author. The present article first deals with the first Greek thinkers (Thales, Anaximander, Anaximenes, Heraclitus, Pythagoras, Parmenides). The problem was, after them, found to be: All transformations being illusory appearances of the senses, to seek what is true and stable behind all these false phenomena. The solution of the problem was strangely enough obtained, for the greater part, by the appropriation of a doctrine which had failed in geometry,—the doctrine of the Pythagoreans that geometrical figures were sums of points. This doctrine was destroyed by the discovery of incommensurables and by the reasoning of Zeno. Future mathematicians built up geometry on new and more secure bases; and the fundamental conception of the theory of composition of points passed into the theory of the composition of bodies. Three directions then presented themselves: (1) Empedocles's theory which admits of a limited number of primitive substances which are invariable and, by their mixture, make very different substances appear; (2) the theory of Anaxagoras which considers all substances as existing from the beginning and independently of one another, and makes the appearance of that which predominates depend on phenomena of association and dissociation of similar elements; (3) the theory of Leucippus and Democritus which postulates one and one only original element and explains the various aspects which it presents by the fact that the atoms are susceptible of receiving different forms or of having different relative positions. The fact is emphasised that these theories are connected with Parmenides's idea of the invariability of the true being. The doctrine of Empedocles is examined in some detail: it was the one most generally adopted by antiquity, by the middle ages, and even by the theoretical chemistry of the nineteenth century. The article will be followed by another.] **Th. Moreux.** 'On nous entraîne notre soleil.' [A sketch of the history and results of the question as to the proper motion of the fixed stars, up to quite modern times.] **A. J. Herbertson.** 'The Higher Units. A Geographical Essay.' ['If the geographical region is a macro-organism, then men are its nerve cells. In some of the huge regional creatures this collection of human units is more or less amorphous, a scattered mass of undifferentiated nerve cells, an unimportant part of the whole. In others he is well organised and specialised as an essential part of it, having set his mark all over its surface, in fact he is a sort of a higher nervous system in it. But he is no more, though no less, to be considered apart from the rest of these leviathans than the nervous system is to be considered apart from the rest of the organism of which it is an essential element. For purposes of investigation it is often necessary to consider one element alone; but for the full understanding of the organism, or of the macro-organism, the nervous system, or the human society, cannot be separated from it. That such regional leviathans exist, and that we each are a part of one, is the theme of this paper. The personality of such leviathans, like the personality of men, is another question.'] **E. Rignano.** 'L'evoluzione del ragiamento. II<sup>a</sup> Parte: Dal' intuizione alla deduzione.' [In the first part of this article, the author had said that parallelly to the passage from concrete forms to forms more or more

abstract, and in consequence of this passage, reasoning acquires an increasing complexity and an increasingly extensive capacity of application. It is with this aspect of the evolution of reasoning that this part is concerned. A further article dealing with the higher forms of reasoning is promised.] **S. Freud.** 'Das Interesse an der Psychoanalyse. I. Teil: Das psychologische Interesse.' [Psycho-analysis is a medical method which tries to cure certain forms of nervous disease by a psychological technique. This article explains, by a series of examples, what the author has claimed for the new science.] **H. Jacobi.** 'Was ist Sanskrit?' [The article studies the importance and the position of Sanskrit in the evolution of language and Indian civilisation.] Critical note: **S. Jankelevitch.** 'Les chevaux pensants d'Elberfeld.' Book Reviews. General Reviews: **S. Feist.** 'La question du pays d'origine des Indo-Européens.' Review of Reviews. Chronicle. Supplement containing French translations of German, Italian and English articles. Vol. xiv., No. 3, November, 1913. **A. Mieli.** 'La teoria delle sostanze nei presocratici greci. 2a Parte: Anassagora e gli atomisti' [In this second part, the other doctrines are considered. The theory of Anaxagoras has not been understood until lately, and has, at least when developed, a quasi-modern signification.] **J. C. Kapteyn.** 'On the Structure of the Universe.' [Considers the questions as to what the discovery of what is called "star-streaming" has done and what it promises to do for the solution of, (1) the problem of the distances of the stars from one another on the line of sight; (2) the problems of the history of the stellar system. A good beginning of the work in question has been made.] **W. Mecklenburg.** 'Die Lehre von den Elektrolytlösungen.' [A somewhat technical article, but the subject is of philosophical interest as showing how two currents of investigation, which had seemed quite independent of one another, were united in a higher synthesis.] **S. Freud.** 'Das Interesse an der Psychoanalyse. 2 Teil; Ihr Interesse für die nicht psychologischen Wissenschaften.' [Its interests from the points of view of the sciences of language, philosophy, biology, the history of evolution, the history of civilisation, the fine arts, sociology, and pedagogy.] **C. Guignebert.** 'Le dogme de la Trinité. 1<sup>ère</sup> Partie: Les triades primitives et la formule baptismale.' [Shows, on a particular example, how the fundamental beliefs of a religion originate, develop, are fixed, weaken, and die.] Critical note: **A. Van Jennep.** 'Les lacunes de l'ethnographie actuelle.' Book Reviews. General Reviews: **H. Piéron.** 'L'évolution de l'opinion scientifique actuelle sur la question du mimétisme.' **W. Oualid.** 'Revue annuelle d'économique.' Review of Reviews. Chronicle. Supplement containing French translations of German, Italian, and English articles.

## IX.—NOTES AND NEWS.

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THE ATHENÆUM,  
PALL MALL, S.W.,  
4th October, 1914.

SIR,

With reference to Mr. Paton's interesting review of my translation of B. Croce's *Filosofia della Pratica*, I think it would be fair to me if Mr. Paton would be so good as to indicate where I have ignored 'grammar' or 'sense'.

The literary elegance of the translation has been extolled in the *Times*, and while pointing out one or two printer's errors of punctuation and possible ambiguities of phrase, quite comprehensible in a work of such length, Mr. Bosanquet in the *Hibbert Journal* describes it as "fluent and readable". I mention these two instances from many similar against which Mr. Paton's view of the translation stands, so far as I know, alone, looking in consequence very like a wilful misstatement of fact.

Hoping that in justice to the first English discoverer and translator of a masterpiece you will insert these lines,

I remain,

Your obedient servant,

DOUGLAS AINSLIE.

My judgment upon Mr. Ainslie's translation was carefully formed and deliberately expressed. I am sorry to hurt his feelings, but I am perfectly convinced that my judgment is sound, and I cannot discuss the opinion of other reviewers, still less the needless insinuation that I have been guilty of wilful misstatement.

Restrictions of space prevent me from giving a selection of his worst mistakes, but I will give one glaring example. I choose it because it makes nonsense of Croce's most fundamental doctrines, and if Mr. Ainslie is capable of this kind of error, there are few kinds of error of which he will not be capable. It will repay careful study, and, in the necessary absence of greater detail, will at least go far to suggest that there are probably good reasons behind my criticism.

Croce, *Filosofia della Pratica*, page 73.

"Se, infatti, dalla filosofia teoretica sappiamo che la vera e propria conoscenza si assolve nel ciclo di arte, filosofia e storia, e che, fuori della conoscenza dell' universale, che ci dà la filosofia, e di quella dell' individuale, così ingenuo come riflesso, che ci danno l'arte e la storia, non vi ha altro modo di conoscenza; . . ."

This is a clear, simple, straightforward statement of Croce's most fundamental principles in regard to knowledge. Consider what it becomes in the hands of Mr. Ainslie, page 103 of his translation.

"If indeed we know that the true and proper knowledge of theoretical philosophy is resolved into the cycle of art, philosophy, and history, and that we possess no other means of knowing the individual, both ingenuous and reflective, outside the knowledge of the universal given by philosophy, . . ."

This is obviously not a temporary lapse. It is comparable to the work of a schoolboy looking up words in a dictionary and setting the results down anyhow. It ignores grammar and it ignores sense. It is in fact unmitigated nonsense. To read Croce through this medium is to get a distorted view of his whole philosophy, and, sharing, as I do, some of Mr. Ainslie's enthusiasm for the original, I am all the more obliged to reaffirm a criticism which I hold to be perfectly just.

H. J. PATON.

By the courtesy of the Editor I am enabled to make one correction of my article "Objectives, Truth and Error," in the last number of *MIND*. I was unfortunately unable to return the proof in time to have the correction made before the October number was finally made up. On page 501 I urge as against Mr. Russell's statement that the multiple relation of judging, in virtue of its sense, arranges the objects of the judgment in a certain order, that the objects of the judgment are already arranged in an order independent of the relation of judging, and that it is just the point of a true judgment that it announces such an objective order independent of itself. But then I went on to say that this objection that the mind in judging can only add itself to an independent objective complex, although true, is really a denial of Mr. Russell's main point that judging is a multiple relation. This, however, I saw almost as soon as I had sent my article to the Editor, is not the case. To adopt this common-sense, objective view of judgment is in no wise tacitly to deny that judging is a multiple relation. The matter can be illustrated by means of the relation of 'between'. When a third thing C adds itself to the two things A and B in a certain way the relation of 'between' arises. Nevertheless, 'between' remains a multiple relation subsisting between the three things A, B and C, although we have at least two new dual relations, namely that between C and A and that between C and B. Similarly when I judge that A is to the right of B, the two objects A and B are already arranged in an ordered complex to which the judging mind can only add itself. But this does not necessarily mean that the relation of judging which we are seeking to characterise is a dual relation between the mind, on the one hand, and the ordered objective complex A-r-B, on the other, although again we get new dual relations, namely between the mind and each of its objects, relations which, Mr. Russell insists, are involved in judgment but are not the essence of judgment. What the objection does tacitly deny is that the relation of judging is, so to speak, purely multiple, *i.e.* that the objects are never found except as related by the multiple relation of judging. But this can be rightly denied, for what all judgment seeks to do is to characterise such relations subsisting independent of the judging mind in its objects.

The objection, however, although sound so far as it goes, is not one on which we should rely before we have offered some solution of the difficulty of impossible objects and of error. It succumbs in turn to the counter-objection that to talk of the mind's adding itself to an objective complex is not to do justice to the essential nature of judgment. Judgment is no more such a complex + mind than it is two peas + a third pea. When, however, we have found some sort of solution of the problem of error, as *e.g.* by the doctrine of Objectives which I afterwards tried to formulate, it should encourage us to have this pre-scientific view as to the objective nature of judgment on our side.

E. H. STRANGE.

### OBITUARY NOTICE.

On the 2nd December, 1914, a great loss to philosophy and a personal loss to an extremely wide circle of friends occurred in the death of Prof. A. Campbell Fraser, at the advanced age of ninety-six. An account of his career is being arranged for by this review.